

Demographic review of the UK social sciences



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The Review

This demographic review of the UK social sciences was commissioned by the Training and Development Board of the Economic and Social Research Council (ESRC) in January 2005.

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‘The ESRC will adopt flexible strategies to address the particular needs of and challenges faced by individual disciplines’



Foreword

It is widely acknowledged that the UK is a global leader in social scientific research. Sustaining that position requires the maintenance of a vibrant, high quality research base. Yet recently a number of questions have been raised over the long term health of the UK social science research base. Of particular concern has been the demographic profile of the academic workforce and a growing fear that the current level of retirement is not being matched by new recruitment and retention within the sector.

In January 2005 the Economic and Social Research Council (ESRC) commissioned a multidisciplinary research team to undertake a systematic analysis of the demographic profile of the UK social science community. This review drew upon a range of national statistical data sources along with a major survey of heads of social science departments, to establish their views on the state of the UK social science research base. The review also included discussions with human resource managers at various institutions, ESRC Centre Directors and postdoctoral fellows.

This report sets out the detailed findings of that review. The report reveals that the UK social science community is generally older than that of the natural and physical sciences and an investigation of the age distribution indicates that this presents a challenge to the long term health of the social science base. However, the report stresses that there is considerable variation within this picture, with some disciplines facing particularly acute problems and others being in a healthy state demographically. These problems themselves vary between different disciplines and the report recommends that discipline specific strategies are necessary.

We have already started to respond to these findings by developing a targeted strategy for building new research capacity, concentrating extra support in those disciplines whose long term health is most in question. The ESRC will also adopt flexible strategies to address the particular needs of and challenges faced by individual disciplines. These include:

- support for additional studentships and fellowships and higher stipends and salaries in priority areas
- the development of strategic initiatives with other funding agencies in priority areas
- an increase in support for postdoctoral and early career researchers by ESRC through the postdoctoral fellowship scheme and new early career fellowship initiatives
- the introduction of a First Grants scheme to help new researchers
- support for doctoral studentships linked to larger grants
- providing training and development throughout the academic life course.

We see these as initial steps, and will continue to draw upon the findings arising from the report to develop targeted strategies to meet the diverse needs of the social science community. In doing so we are confident that the ESRC will contribute to the sustained development of a world class social science research base within the UK.

However, in order to be truly successful, efforts to address the problems discussed in the report will need full participation from every area of the social sciences. In publishing and distributing this report we hope to encourage the wider academic community to engage with this debate and work together to ensure that all of the disciplines that make up the social sciences face a healthy future.



A handwritten signature in blue ink that reads 'Ian Diamond'.

Professor Ian Diamond FBA, AcSS
Chief Executive, ESRC

‘Much recent public debate about the ‘health of the disciplines’ in UK Higher Education has focused on student supply and demand’



Summary and recommendations

This review was commissioned by the Economic and Social Research Council (ESRC) to address the health of the disciplines in UK Social Science. Is a future staff recruitment crisis likely given the age-profiles of some disciplines? What are the implications of increasing numbers of non-UK national staff in for the sustainability of certain disciplines? How appropriate is the ESRC's current model for funding research training? Is there an over-supply, or an under-supply, of PhDs? This summary highlights our main findings and policy recommendations.

In order to answer these questions we assembled evidence from a variety of sources. Starting from an analysis of national-level datasets provided by the Higher Education Statistics Agency (HESA), we then conducted our own survey of more than 315 departments, and interviewed a further 100 senior staff to prepare a detailed picture of the research, staffing and capacity-building agendas facing the social sciences. We also surveyed the directors of ESRC-funded Research Centres and Programmes and involved more than 60 ESRC-funded postdoctoral fellows in focus groups, in order to look at future issues facing the social sciences. Inevitably, the different academic stakeholders have their own priorities and perspectives, and these are represented in the 18 detailed case-studies of individual disciplines.

Much recent public debate about the 'health of the disciplines' in UK Higher Education has focused on student supply and demand, and particularly on the closure of undergraduate courses, rather than on the quality of the research being carried out. This research capacity is central to the future role of the social sciences.

This summary sets out our key findings and recommendations. The main report provides the analysis on which these findings are based, and includes a discussion of our methods and approach to defining the social sciences, our findings on recruitment, retention, aging and internationalisation, and the discipline case-studies. The report concludes by exploring the challenges facing those pursuing a research career in the social sciences.

A key finding that colours the whole report is that the social sciences are remarkably diverse in terms of their internal demographic structure, their patterns of recruitment and their problems of retention. This diversity can be seen as structured on two dimensions. Disciplines can be divided into those with a primary orientation to research within UK Higher Education (e.g. Sociology, Anthropology, Geography), and those in which academic research overlaps with a significant concern with professional practice outside academia (e.g., Education, Management and Business Studies, Social Work). The second division (which partially overlaps with the first) is between disciplines whose graduates often go on to work in other areas of academia ('exporter' disciplines), and disciplines whose academic workforce is significantly dependent on staff trained in other disciplines ('importer' disciplines).

It follows from this that different disciplines may need quite different kinds of support from ESRC in the future, and the best way to develop a more diverse portfolio of training initiatives is for ESRC to engage creatively with those subject communities facing the most challenging issues in the medium and long-term future.

Key Findings

Demography of the social sciences

1. The size of the academic social scientific community in the UK is somewhere between 14,000 and 30,000 staff. The lowest estimate is based on research-active staff in the 'core' social sciences, whilst the highest estimate includes all academic staff teaching and researching in all social-science related disciplines.
2. Compared with the natural sciences, social science staff are older, and there is a higher ratio of women to men. A lower proportion are employed on researcher grades and there is a higher proportion of lecturing staff. The natural sciences tend to have a younger age profile, are predominantly male, with high numbers of researchers, many on fixed-term contracts.
3. The proportion of staff on fixed-term research contracts in the social sciences has increased in the last 10 years. In the same period the proportion has declined in the natural sciences. Given the commitment by universities to reduce the use of such contracts, and the insecurity they create for individuals, this aspect of the move towards a natural science research model is a concern.

4. There has been a significant expansion in research postgraduate activity in the social sciences. In a period of six years from 1994/5 to 2001, there was a 50% growth in PhDs awarded across the social sciences, with subjects like Education, Sociology and Social Policy more than trebling the total number of PhDs awarded.
5. The survey highlights the relative low 'disciplinarity' in the organization of social science in the post-1992 universities. Many of these are organized as schools linking cognate disciplines rather than in more traditional single-discipline departments. This may explain their limited success in accessing ESRC funding for training initiatives that remain predominantly disciplinary in their structure.
6. There is a great deal of social science research activity in the 'new' post-1992 institutions. Yet disciplines are quite unevenly distributed between the two sectors. In 2001 only 5% of Anthropology staff were in post-1992 institutions, compared to 16% of Linguistics staff, 36% in Psychology, 39% in Social Policy and 48% in Business Studies. In 2004-5 just 5% of research expenditure and 3% of training expenditure went to post-1992 institutions.

Defining Disciplines

7. Each of the funders of UK university research and teaching has their own definition of the disciplines which constitute the social sciences.
8. National-level data sets are particularly unreliable for the largest and smallest disciplines, for those drawing from a range of subjects ('rendezvous' disciplines) like Development Studies and Area Studies, and for revealing new and emerging fields such as Criminology. It is also difficult to firmly identify the social scientific ('ESRC') component of the larger disciplines like History, Geography and Psychology.
9. As a result, there can be no one definitive population figure for the different social science disciplines, especially those spanning the social and natural sciences (such as Geography and Psychology), interdisciplinary fields like Area Studies, or professional fields like Law. This makes a population-based allocation of funding resources difficult.
10. For the purposes of this review, counting staff by their designated Research Assessment Exercise (RAE) unit of assessment (UoA) (both research active or not) offers a more useful picture of where staff are located and the work they are doing than the standard classification of staff by their discipline of highest qualification (JACS).
11. UK-level datasets reveal systematic differences between disciplinary populations, as classified by RAE unit of assessment and as classified by the discipline in which individuals were trained. The simplest explanation for this phenomenon is that some social sciences export their students into other academic domains, while others depend on importing trained staff from outside the discipline. We classify some disciplines as 'exporter' disciplines and some as 'importer' disciplines, based on patterns of post-training migration between fields.
12. Academic staff trained in the 'exporter' disciplines such as Economics, Sociology and Anthropology are often employed by 'importer' disciplines such as Education, Management and Business Studies, Planning and Social Policy. In general, the research-focused disciplines tend to have relatively younger age-profiles, and be net 'exporters' of PhD-trained academics into the more practice and policy-linked fields. This has important implications for the funding and content of research training.
13. The social sciences vary greatly in size. Management and Business Studies is the largest with almost 7000 permanent and temporary staff. Education is second largest, with around 5000. Anthropology is one of the smallest disciplines, with just over 300 staff.
14. The data on staff and student numbers from our survey of departments and centres allow us to cluster the disciplines into three broad types. Management and Business Studies, Accountancy and Education form one cluster; with high numbers of staff and taught Masters students in each unit. Anthropology, Economics, Politics and Psychology make up a 'research-focused' cluster (along with Geography, Sociology and Linguistics), often in autonomous departments with smaller staff numbers but high numbers of research students. A third cluster of more practice-oriented fields (Cultural, Communication and Media Studies, Town and Country Planning and Socio-legal Studies) mediates between the two extremes.
15. This classification resonates with the picture that emerges from our interviews. Academic disciplines which seek to recruit researchers with first-hand experience of professional practice outside academia ('practice-based disciplines') face different recruitment problems than more traditionally academic disciplines, for whom new academic staff could be recruited from a conventional first degree-Masters-PhD academic track ('research-based disciplines').

16. The research-focused disciplines tend to have a significantly younger age-profile than the practice-linked disciplines. This is primarily the result of different career paths and recruitment patterns.
17. There is also significant variation in gender and employment profiles across the disciplines. Social Work and Linguistics have 60% female staff, whereas Economics and Politics/International Relations have less than 25% female staff.

The view from the disciplines

18. The eighteen disciplinary case-studies included in this report divide the social sciences into two broad categories of 'research-focused' and 'practice-linked' disciplines. Drawing on extensive interviews as well as the qualitative data collected in a survey of 317 departments, the discipline-centred view they present complements the picture provided by national-level data.
19. Education and Management and Business Studies stand out from the other social sciences by virtue of their size, numbers of taught postgraduate students, the complexity of their sub-fields, and their unusual age and job-grade profiles. However they share with a number of other practice-linked fields a common concern to sustain and develop their autonomous research capacity.
20. The case-study in advanced quantitative methods reveals that research capacity in quantitative methods remains an issue in specific fields across the social sciences.

Recruitment and retention across the social sciences

21. There is a growing concern about recruitment, retention and aging in the UK social sciences. Rather than a generalised age or recruitment crisis, our evidence reveals that these phenomena are discipline- and skill-specific, and sometimes related to the strength of the relevant external labour market. They have different causes and may need to be tackled in different ways. The case-studies in this report address this diversity in detail.
22. National data-sets offer limited insight into the changing shape of disciplines, their particular recruitment patterns and career paths, and their relationship to non-academic labour markets. Recruitment also depends on undergraduate and postgraduate 'demand', which can fluctuate over time. Can one develop a predictive model of disciplinary recruitment and training needs? Such a model would require accurate counts of appointment and leaving rates. In a dynamic and changing employment market, such data is very difficult to collect accurately at discipline level.
23. In a dynamic employment market, a focus on impending retirement 'bulges' is less useful than an attention to the recruitment of permanent staff and the retention of research staff.
24. The fields of Education, Management and Business Studies, Social Work and Social Policy appear to have 'aging' demographic profiles. More than half of the staff in Education are aged 50 or over: Social Work (47%), Social Policy (42%) and Management and Business Studies (41%) also have high proportions of older staff. However there is more to this than meets the eye. These fields tend to expect their lecturing staff to have acquired practice-based experience and developed a research profile, especially in the pre-1992 universities. This makes permanent appointees relatively older than their peers in the research-focused disciplines.
25. Education's profile is particularly unusual, because it often recruits senior teaching professionals from secondary education. However, professionals take up posts in a number of practice-linked disciplines as second-career researchers (but such recruitment patterns may be changing as universities continue to prioritise appointees with extensive research experience in response to RAE pressure).
26. Within the research-focused disciplines, Sociology also has 42% of its staff aged over 50, and Linguistics just over 40%. These age profiles are more likely to be the cohort effect of 'bulges' in staff appointments (e.g. in the 1960s and early 1970s) working their way through the system. They may also partly be the result of a drop in student (and thus staff) recruitment in these disciplines.
27. The majority (58%) of respondents to our survey do report recruitment problems of some sort. They are particularly highlighted in relation to senior and professorial staff, staff with advanced quantitative skills, as well as research staff. Fields reporting the highest percentage of problems were Economics (100% of respondents) and Management and Business Studies (85% of respondents).

28. The distribution of unfilled posts is relatively uniform across the disciplines, equivalent to 3% of all permanent posts. One third of these posts were at professorial level. Economics and Management and Business Studies do not report larger proportions of unfilled posts relative to their total staff size than other fields. Some respondents identified particular sub-specialisms and growth fields as a concern because institutions were chasing a small pool of strong candidates. Others were worried about the quality of appointments to senior posts.
29. Recruitment and training concerns expressed by the policy and practice-linked disciplines are a key priority for the ESRC. Their dual identities as fields of academic research and areas of professional practice are a strength rather than a weakness, but one that requires academics to have both professional practice and research experience. The recruitment difficulties these fields face could be addressed in creative ways by institutions. One solution might be to create more salaried doctoral training positions that allow people to fund their PhDs whilst teaching. Universities may also need to support junior researchers and PhD students to acquire the relevant professional experience. Competition with the non-academic labour market is probably inevitable, and may well be cyclical, depending on the relative health of the broader economy.
30. In general, our survey showed that Heads of Department did not see turnover as a problem, although dissatisfaction with RAE-related poaching was cited as a concern by some. A department's RAE score seems to make little difference to relative recruitment problems. But departments/units with a 5* RAE rating have fewer staff turnover problems than other departments. Institutions are increasingly developing human resource strategies to tackle recruitment and retention problems in particular disciplines, such as Economics. These ameliorate but are not seen as solving recruitment problems.
31. Non-UK nationals with UK PhDs represent an important source of high quality recruitment to UK social science. The recruitment of international staff is increasing in several of the social sciences, and in Economics, Linguistics and Anthropology less than 70% of all permanent staff are UK nationals. The trend is most marked for Economics: in 2003/4 only 45% of their permanent staff under 35 held UK nationality, whilst a further 32% were EU nationals. In addition 38% of new permanent appointments in Economics did their highest degrees in the US. The social sciences are not unique, similar trends are occurring within Physics and Chemistry. However other social science disciplines, such as Social Work, Social Policy and Education have not experienced equivalent levels of international recruitment.
32. Non-UK nationals are more likely to hold fixed-term contracts than permanent contracts. Such staff are more likely to move to another UK Higher Education Institution (HEI) than to take up an academic post outside the UK, but those staff who do take up academic posts outside the UK are more likely to have been on fixed-term contracts. Non-UK nationals with permanent contracts are as likely to move to another UK HEI as to a non-UK HEI.
33. Our survey reveals that senior figures within HEIs are less concerned about employing international staff per se than about ensuring that UK universities remain competitive and can recruit the best possible staff. Respondents focused on the long-term importance of recruiting the very best students – whether or not they are UK nationals – to do PhDs and develop academic careers. The future international competitiveness of the UK Social Sciences also depends on ensuring that the best UK-trained PhDs remain employed within UK Higher Education, regardless of their country of origin or location of first degree.

The future of the social sciences

34. The ESRC Research Centres offer a very different perspective on research skills to that found within the disciplines, highlighting a post-disciplinary role for the social sciences. They focus on the importance of creating sustainable career structures for research staff beyond the disciplines. This is made difficult by the time-limited funding granted to the Centres, and problems with fixed-term employment contracts. Their directors also point to the problems caused by a limited supply of British social researchers with high level quantitative skills.
35. The RAE culture presents particular challenges for young researchers, and is felt by many of them to have a negative influence on the development of research careers. Personal and family considerations weigh heavily in the anticipated future plans of young research staff and postdoctoral fellows. Non-UK postdoctoral fellows envisage establishing careers in the UK, but see academia as wholly international.
36. Young researchers receive very mixed messages about the value of inter-disciplinary work from their mentors, and they are often advised to remain within disciplinary cultures of patronage and networking. Postdoctoral fellows are

sensitive to existing university research and status hierarchies. They also spoke negatively about the consequences of being 'burdened' with heavy teaching loads.

37. Few of the post-doctoral fellows were enthusiastic about teaching. This underscores the importance of maintaining links between research and teaching for the future sustainability of the social sciences. The debate about building research 'capacity' is limited by a definition of research, its dissemination and 'outcomes' that does not consider the broader integration and transfer of knowledge, especially through academic teaching.

Recommendations

As we make clear in the recommendations that follow, we see the ESRC as playing a key role in raising the quality of research training and academic development in all disciplines, with the particular aim of enhancing research capacity in the 'importer' and practice-linked disciplines. We also highlight the importance of training and recruiting staff with advanced quantitative methods, and the need for systematic training for those working on the new boundaries between the social sciences and medicine, and the boundaries between the social and natural sciences. Such work requires specific sets of skills and capacities, and is a field that would merit further investigation and intervention by the ESRC.

We welcome the growing international staff profile of some of the social sciences. We see it as a source of vitality and innovation rather than instability. We have found no evidence that appointing non-UK nationals to permanent lectureships is likely to lead to retention problems. The problem is more one of ensuring that graduate training in the social sciences remains at the highest international standards. The challenge is a dual one: to encourage the strongest candidates (including British nationals) to apply for PhDs, and then to assist their career development so that they are in a strong position to seek subsequent permanent employment within UK universities. In some cases, the appointment of international staff has been limited by outdated work-permit restrictions within institutions.

At the same time, we call for stronger institutional networks, academic exchanges and research linkages between UK and overseas universities (especially those in less developed countries), to support collaborative international social scientific research and to prevent growing academic emigration from the poorest economies. This collaboration would also help to assert the world-class status of the UK's social sciences.

Many of our respondents highlighted the conflicting demands of teaching and research in a context of diminished resource, especially in fields with growing student numbers or institutions with RAE ambitions. Universities and Human Resources departments have to be realistic about the pressures facing academic staff in the social sciences, and could do more to develop institutional strategies to link teaching and research.

The evidence assembled in this review allows us to make a number of specific recommendations for ESRC training and development policy. The recommendations cover different degrees of immediacy, from advice on allocations of awards to much longer-term investments in new schemes to build capacity in areas of need, especially in the practice-linked disciplines. They alternate between structural changes, addressing ways in which the ESRC's current training provision impacts unfavourably on a number of fields, to issues of process, in which the ESRC might work more closely with the relevant disciplinary community in together developing new initiatives. We have organised them accordingly.

General recommendations

1. That there can be no one-size-fits-all solution to training and capacity building in the social sciences. All statistical measures of disciplinary size have their own problems. Therefore any indices of disciplinary population require considerable interpretation before use in allocating studentships.
2. That the UK's Research Councils recognise the heterogeneity of the social sciences, and that different funding, training and capacity-building responses are needed for different kinds of problem. Whilst broad disciplinary groupings have common sets of concerns, ESRC responses should be evidence-based, implemented in consultation with disciplinary communities and tailored to particular circumstances.
3. That the Research Councils remain alert to the way special interest lobbying can distort the pattern of support, strengthening artificial boundaries at a time when much of the most exciting new work crosses the boundaries of those interest groups. In the longer term, the ESRC may need to review its disciplinary-based approach to the allocation of training funding.

Recommendations relating to training and development

4. Masters programmes play an important role in providing trained social statisticians for a broader labour market, and ESRC should consider funding stand-alone awards for students on these programmes.
5. Development of an expanded programme of one-day workshops and intensive 'summer schools' in quantitative methods and statistics, along the lines of the Essex or Ann Arbor Summer Schools and the training workshops offered by the Research Methods Programme.
6. Greater collaboration with professional associations such as the Royal Economics Society, including workshops to help students prepare studentship applications. The ESRC could also consider allowing departments to 'recycle' studentship allocations in areas like Economics if a student leaves and/or rewarding outlets with the highest retention rates.
7. Developing joint-funded (with HEIs) two-year postdoctoral fellowships, in which teaching (and preparation for teaching), and promoting more part-time applications for postdoctoral fellowships.
8. More systematic careers guidance for postdoctoral fellows. Those pursuing PhDs in the 'exporter' disciplines would especially benefit from understanding the variety of career paths open to them.
9. Initiatives to make social science research careers more sustainable. This may involve ensuring that research centre staff are guaranteed continuity of funding through the life-time of the centres.
10. Building on the current HEFCE/ESRC/AHRC Languages Initiative, further collaboration between the councils to ensure that Area Studies departments and outlets gain recognition to offer PhD studentships that flexibly combine appropriate proportions of language and methods training.
11. Closer collaboration between the Research Councils to promote research training for those social scientists working on the boundaries between the social, natural and medical sciences.
12. A new collaboration between the Research Councils, the disciplinary professional associations and the subject centres of the Higher Education Academy on disciplinary-specific initiatives to prepare future staff for teaching and academic practice, including this within doctoral training provision where possible.
13. Further research is required into the 'exporter' and 'importer' disciplinary clusters, their relationship, and the implications of this model for research training and capacity building.

Recommendations relating to practice-linked disciplines

14. The disciplines and Research Councils work together to develop long-term strategies for enhancing research capacity in the practice-linked disciplines.
15. Dialogue within the practice-linked disciplines about the best way to ensure ESRC training and capacity-building initiatives are tailored to their own needs. This could take the form of an open forum involving the different research and practitioner stakeholders, as has been proposed within Education.
16. The development of training initiatives and Masters courses organised in association with professional employers and practitioners.
17. Review the appropriateness of the 1+3 studentship model for practice-based subjects with high levels of mature students, or salaried professionals, on doctoral programmes.
18. Jointly-funded PhD studentships, in new collaborations between Business Schools and universities and the ESRC. These would be aimed at attracting mature entrants into disciplines such as Management and Business Studies and Education. A salaried component to the stipend, provided by the institution in return for teaching duties, would attract a stronger pool of candidates.
19. Support for the Management and Business Studies community to publicise and proactively promote academic careers and its funded PhD studentships. This would encourage the most able candidates, whether undergraduates, postgraduates or those already working in industry, to consider academic careers.
20. Ring-fencing of research initiatives such as AIM within Management and Business Studies and the TLRP within Education until these fields are able to compete with other disciplines on equal terms. Such schemes play a role in nurturing research capacity and stimulating debate.

Recommendations relating to internationalisation

21. That the UK Research Councils place as much emphasis on retaining qualified research staff in UK academia in the years after the PhD as on the initial recruitment and training process. The UK social science community needs to encourage the retention of its best PhDs, whatever their country of origin or location of their first degree. Full PhD studentships for EU nationals in certain disciplines (such as Economics) may be necessary to ensure the strongest possible pool of applicants for permanent posts, as funding and legislation permit.
22. More work to build international academic collaborations; exchanges, fellowships, and research networks, as a way of enhancing the UK's global standing within the social sciences. The quality of an increasingly global social scientific output depends on equitable and ethical academic co-operation between different national academies.
23. That research and development policies consider academics in the round – as men and women with familial and caring relationships and responsibilities in their lives. These relationships impact enormously on career decisions and job mobility.
24. The commissioning of detailed further research into international academic career trajectories, exploring the pattern over time by discipline, grade, employment status and gender, to explore the impact of greater international labour mobility on research capacity in the social sciences. Research could also be conducted on the career paths of international students choosing to take Masters degrees in the UK.
25. The commissioning of an international comparison of undergraduate social science courses, to analyse the form and extent of the quantitative training being offered at this stage, and the reasons students cite for continuing (or not) into postgraduate study.

‘Some have suggested that there is a looming crisis, as a generation of staff recruited in the 1960s nears retirement’



I Introduction and background

In January 2005, the ESRC commissioned this review of the demographic profile of the UK social sciences. Evidence submitted to the Parliamentary Select Committee in 2004 suggested that the social science community had a disproportionately high percentage of staff over 50, and that this would impact on the future research capacity of the social sciences. The terms of reference for the present review were to:

- establish the current demographic profile of the UK social science community on a disciplinary basis and discover trends over a period of time
- identify where there are emerging gaps in the maintenance of research capacity in particular disciplines and sub-specialisms, taking into account the level of recruitment and turn-over of non-UK academics
- locate where there are needs to refresh the research capacity in those disciplines
- identify where there are needs to build capacity in new emerging areas of social science research
- consider appropriate strategies for the recruitment and retention of researchers and how those might vary between disciplines
- consider the relationship between the demand for PhDs and (where relevant) undergraduate degrees and the replenishment requirements within specific disciplines. The stock of qualified academics to teach increasing numbers of students and replace retiring staff needs investigating.

The review is intended to inform the work of the ESRC's Training and Development Board.

In a first stage of the review, Evidence Ltd, a commercial research consultancy, provided a series of customised data tables from Higher Education Statistical Authority (HESA) data. After the tender for the second stage of the review was awarded to the present team, an initial meeting with the Commissioning Panel for the review in January 2005 identified the recruitment and retention of non-UK nationals as a growing concern for the ESRC. The Commissioning Panel also proposed that the main part of stage two of the review should consist of a survey of all Heads of social science departments in the UK, adapting and enhancing an earlier survey carried out of Economics departments (Bell 2004).; Our survey of more than 340 departments, schools and ESRC-funded Research Centres explored the implications of aging, internationalisation and research capacity at disciplinary, sub-disciplinary and inter-disciplinary levels.

A great deal of quantitative and qualitative data was provided by our respondents, and we would like to thank all of those who provided such thoughtful and detailed responses. The strength of this review is exactly this detailed evidence-base on which we make our argument and analysis. In the pages that follow, we hope to convey the complexity and subtlety of this information, and the issues it raises for the future research capacity of the social sciences in the UK.

Existing literature on social science demographics and recruitment

In 2003, the Commission on the Social Sciences produced a thoughtful report on the future of the field, entitled '*Great Expectations*'. Sponsored by the Academy of Learned Societies for the Social Sciences (ALSISS), the Commission concluded that the field was weakened by a 'cottage industry' mentality in comparison to the natural sciences, and that more needed to be done to strengthen the social sciences' public image, research profile and engagement with users of all kinds.

The call to strengthen research capacity within the social sciences is partly manifested in growing anxiety over the existing demographic profile of academic staff, and the challenge of recruiting their future replacements. Some have suggested that there is a looming crisis, as a generation of staff recruited in the 1960s nears retirement, and as younger generations of potential academics are put off by poor salaries and working conditions. The latest survey of higher education as a whole (Metcalf 2005) did not identify severe problems, but rather pointed to the way that difficulties were cyclical, and varied by subject and over time.

The validity of such claims can be assessed using a number of recent national surveys of staffing and recruitment within UK universities. These include: two Higher Education Funding Council for England (HEFCE) surveys of staffing trends (HEFCE 2002, 2005); a major Department for Education and Skills (DFES) funded survey of recruitment and retention of

academic staff in Higher Education (Metcalf 2005), and a lengthy report on human resource strategies by the Higher Education Policy Institute (HEPI 2005). Collectively, these reviews offer a great deal of insight into the personnel issues facing the sector as a whole, and are carefully discussed in the chapters that follow. However they dwell less on disciplinary-specific areas of shortage or research capacity within the social sciences. By discussing the needs of social scientists as researchers as well as teachers, this report complements and builds upon this literature.

The literature on human resource management shows how personnel departments are tackling recruitment issues. HEPI's report *'Mission Critical? Modernising Human Resource Management in Higher Education'* (HEPI 2005a) notes the increasing number of international appointments, describing this as a 'new world war for talent'. In this vision, internationalisation is not necessarily seen as a human resource problem, but rather as the new 'front' on which the best universities have to compete. Such an attitude was confirmed by one of our respondents, a senior social sciences Administrator in an elite university. Describing his institution as recruiting internationally, he detailed the fields (such as Economics and Politics) in which recruitment and retention were most problematic.

The HEPI report demonstrates how universities are becoming far more pro-active on personnel issues. Institutions are using salary supplements, additional pay awards, hiring on higher grades, accelerated promotion and 'above-the-scale' salaries at senior levels. Its findings are reinforced by our own interviews. They demonstrate the significant lengths that institutions are going to in order to recruit and retain the best staff. HEFCE has also established the 'Golden Hello' supplements for new academic teachers in Education and Management and Business Studies, but the impact of this initiative is relatively limited.

But Metcalf et al (2005) go on to point out the tensions between academic departments and human resources departments in many universities, especially given the financial constraints under which institutions inevitably operate. Many of the case study universities wrestle with the tensions caused by a delay in appointing staff (leading to an increased workload for existing staff), or the use of temporary cover. They also report that a majority of academic staff regard promotion decisions to be opaque and unfair. Promotion of staff to prevent them leaving had a negative effect on the morale of other staff, and was often counter-productive.

Data sources and Review methodology

This review makes use of a variety of different sources of primary and secondary data on the social sciences. We commissioned our own HESA (Higher Education Statistics Authority) data-set, carried out an extensive web-based survey of social science schools and departments, and a separate survey of ESRC-funded Research Centres. In addition, we conducted more than 30 interviews with subject specialists and senior human resources staff, together with four focus groups with ESRC-funded postdoctoral fellows. Finally, we analysed 120 Business School web-sites to collect more information on staffing in this large and heterogeneous subject field.

HESA national data sets

The focus of this review is on disciplinary staffing and research profiles, as viewed through the lens of research funders, rather than teaching provision. For this reason we chose to use national data on academic staff that best reflects their current field and area of research. The Evidence Ltd data-sets compiled in the first stage of the review were of academic staff by gender, age, and nationality, all sorted by Joint Academic Coding System (JACS) code, for 1994/5 and 2002/3. JACS codes are based on an individual's subject of highest qualification. As we argue in chapter 4, this is less useful for our purposes than data sorted by an individual's assigned RAE unit of assessment (UoA). The HESA data in this report is based on data returns for 2000/1 and 2003/4 for staff in all 17 social science UoAs, including staff inflows, outflows and salary bands, along with data on gender, age, nationality, job grade, and terms of employment. For comparative purposes, we also obtained data on Chemistry, Physics, Biology, History and Earth Science.

Survey of departments

Discipline and institution-specific concerns over staff recruitment, turnover and retention are best explored through targeted surveys, given the limitations of national-level data sets. The web-based questionnaire of social science Heads of Departments used to inform this review was a highly modified version of a survey of Economics (Bell 2004). The questionnaire included several open-ended questions, which generated considerable insightful comment and analysis from respondents. No doubt some respondents filled in the questionnaire with an eye to the potential funding impacts of this review. This needs to be borne in mind when analysing the findings.

The survey's methodology and a discussion of our sample are provided in Appendix 1. In all, 317 responses were received from departments and schools, a global response rate of 30%. Extensive efforts were made to ensure that a representative sample of respondents was obtained from each discipline and inter-disciplinary field. Such purposive targeting is inevitable in an exploratory survey. The 'research intensive' universities are slightly over-represented in the respondent population, which is inevitable, given that that our survey focuses on research capacity within the social sciences

More time and expense could well have resulted in a larger sample size, but the results would not necessarily have been more accurate. Where the sample was particularly small, or where we felt the need to do further investigation, we conducted supplementary phone and face-to-face interviews. These numbered more than thirty in total. The survey and associated interviews generated much insightful qualitative data, not all of which we can include in this report.

Interviews with HR staff and Subject Association representatives

Higher Education Institutions (HEIs) were mandated in 2001 by HEFCE to develop human resource strategies. Yet the written strategies reveal very little about the practical aspects of recruiting and retaining high quality academic staff in areas of shortage. To this end, we conducted interviews with senior human resources staff in several institutions to discuss the particular difficulties they faced. Their insights and views are used to triangulate responses from the surveys, and to enrich the disciplinary case studies.

Survey of Centre Directors

The ESRC currently funds more than 30 specialist inter-disciplinary Research Centres, as well as a number of programmes and networks. The Centres are usually funded for two five-year periods. The Centres promote research into new and emerging fields, and often rely on research staff with skills and experience that cut across existing disciplines. All Centre Directors were contacted by email and asked to fill in a modified version of the departmental survey. Their responses were often very detailed, and offered an invaluable complement to the view from the disciplines. 17 responses were received, and several with extensive textual commentary.

Survey and focus groups with ESRC Post-doctoral fellows

In 2005, the ESRC-funded 108 postdoctoral fellows, a significant expansion in the third year of this competition. As many of these research fellows are likely to apply to permanent academic posts in the UK and abroad, their views and aspirations are a barometer on the health of the social sciences more broadly. Using the opportunity provided by the annual Postdoctoral Fellows Conference, we carried out a survey of the 60 postdoctoral fellows, asking about their future plans and the factors influencing their job choices. We received 20 responses, and also carried out four focus groups with all 60 postdoctoral fellows at the Conference in June 2005.

Survey of Business School staffing

A review of web sites and other documentary sources from 119 HEIs in the UK which have a Business School or significant management departments enabled us to compile a more precise estimate of the staffing within the field by speciality. This has been complemented with interviews with key figures in Management and Business Studies, including representatives of the Association of Business Schools and the AIM (Advanced Institute of Management) research-capacity initiative.

**‘Much recent public debate about the ‘health of the disciplines’
has focused on the closure of undergraduate courses’**



2 Demography of the Social Sciences

Introduction

This chapter presents an overview of the social sciences as a whole in UK Higher Education. How many social scientists are there? Where do we find them? Are they men or women, old or young? What are the ratios between teaching and research staff, permanent and temporary? What are the numbers of postgraduate research students? Do we find the social sciences concentrated in particular types of institution? And how does this broad picture compare with the natural sciences?

The chapter starts with a review of the most recent and useful attempt to address some of these questions by the Commission on the Social Sciences, published as *Great Expectations: The Social Sciences in Britain* (2003). We go on to nuance the Commission's answers using a variety of different national-level statistics. Whilst these statistics bring out some striking differences between the social sciences and other areas of academic work, they inevitably mask the even more striking differences among individual social science disciplines. It is these which we go on to discuss in later chapters.

How many social scientists are there?

The Commission on the Social Sciences estimates that around 30,000 'individuals... are involved at any one time in teaching and/or researching in the social sciences' (Commission on the Social Sciences 2003:123). How do they reach this figure? Using 2000/1 HESA figures for the two cost-centre categories: 'Administrative, business and social studies' and 'Education', they offer a figure of 23,045 on teaching and research contracts with a further 3,460 on research contracts: a total of 26,505. They then complement this with a table of research active staff by discipline from the 2001 RAE, which results in a total, for the 11 units of assessment (UoAs) listed, of 12,386 A and A* staff. This figure includes all staff returned under Law, Geography and Psychology (many of whom would not normally be thought of as social scientists), but does not include RAE figures from Anthropology (286 FTEs) and Linguistics (210), the four RAE Area Studies panels (922 FTEs, of which only a small proportion would be social science) and whatever part of History might be deemed attributable to Economic and Social History.

The Commission's estimates reveal the problems of answering even the simplest questions about the total population of social science academics. The first is how to deal with borderline subjects like Law, Geography and Psychology, which cannot be easily disaggregated into social science and non-social science components. The second is the difference between the RAE research-active figure and the HESA figure. The third is the variation in research intensity, as measured by the percentage of staff submitted to the last RAE (varying from a low of 43% and 46% respectively in Education and Management and Business Studies, to 79% in Politics, 87% in Linguistics and 93% in Anthropology (see Table 2.3). In addition to this is the dominance (in absolute numerical terms) of two big subjects (Education and Management and Business Studies) which, while making up over a third of all UK social science staff, are at the low end of a spectrum of research intensity.

In terms of answering the question of absolute size of the UK social sciences as a whole based on national datasets we have a choice between a 'maximal' and a 'minimal' estimate of population. The maximal version includes all RAE UoAs which contain some social science component, and makes no attempt at excluding the non-social science part of the big borderline disciplines. Our data from HESA for the academic year 2003/4 (Table 2.1) gives a total population of 29,213, calculated on a maximal basis, including for example all of Law and Geography, Communication, Cultural and Media Studies, and two of the four Area Studies UoAs. (This is still somewhat arbitrary, as it excludes, for example, the social science component of History.)

Table 2.1 Total population of Academic Staff by discipline (Maximal Version)**HESA Staff Record 2003/4**

Unit of Assessment	Total staff
46 Middle Eastern and African Studies	159.9
47 Asian Studies	177.3
37 Anthropology	331.0
56 Linguistics	574.8
34 Town and Country Planning	677.9
41 Social Work	812.8
44 Accountancy	814.8
65 Communication, Cultural and Media Studies	1178.8
42 Sociology	1400.0
39 Politics and International Studies	1407.4
38 Economics and Econometrics	1530.7
35 Geography	1759.8
40 Social Policy and Administration	1773.1
36 Law	2600.0
13 Psychology	2871.4
68 Education	5094.5
43 Business and Management Studies	6049.0
Total	29213.2

A more minimal population, excluding Law and the Communication disciplines, but retaining all of Geography and Psychology provides a total of just above 25,000 (Table 2.2).

Table 2.2 Total Population of Academic Staff by Discipline (Minimal Version)**HESA Staff Record 2003/4**

Unit of Assessment	Total staff
37 Anthropology	331.0
56 Linguistics	574.8
34 Town and Country Planning	677.9
41 Social Work	812.8
44 Accountancy	814.8
42 Sociology	1,400.0
39 Politics and International Studies	1,407.4
38 Economics and Econometrics	1,530.7
35 Geography	1,759.8
40 Social Policy and Administration	1,773.1
13 Psychology	2,871.4
68 Education	5,094.5
43 Business and Management Studies	6,049.0
Total	25,097.2

These figures give total populations for academic employment in the social sciences, but do not allow for the variable intensity of research activity. In RAE 2001 the proportion of staff deemed research active in institutional submissions varied hugely between disciplines, from 42.5% (Education) to 92.7% (Anthropology). It might follow then that the gross totals need to be adjusted down to give a better idea of relative research activity

**Table 2.3 Size and research intensity of RAE UoAs
(based on submission to 2001 RAE for A and A* staff in post only)**

	Total number of A and A* research active staff (FTEs)	% staff submitted
Business & Management Studies	2,412	45.8
Education	1,963	42.5
Psychology	1,234	64.4
Geography	1,151	73.6
Politics & International Studies	1,077	79.3
Social Policy & Administration	926	68.4
Sociology	822	63.1
Economics	798	57.0
Social Work	364	44.8
Town & Country Planning	351	51.7
Anthropology	216	92.7
Linguistics	210	87.4
Total	11,524	

(Source Great Expectations 2003 and RAE 2001 HERO website (Anthropology and Linguistics))

If we assume that the 2001 RAE proportions of staff submitted still hold as indicators of the intensity of research activity within a discipline, we could further refine the picture of the total population by applying those percentages to the figures in Table 2.2. This provides a figure (Table 2.4) which represents the extreme minimal estimate, some 13,688 FTEs.

Table 2.4 Research active staff in social science disciplines (weighted by 2001 RAE submissions)

HESA Staff Record 2003/4

Unit of Assessment	Total staff	% research active	research active total
37 Anthropology	331.0	92.7	306.8
56 Linguistics	574.8	87.4	502.4
34 Town and Country Planning	677.9	51.7	350.5
41 Social Work	812.8	44.8	364.1
42 Sociology	1,400.0	63.1	883.4
39 Politics and International Studies	1,407.4	79.3	1,116.1
38 Economics and Econometrics	1,530.7	57.0	872.5
35 Geography	1,759.8	73.6	1,295.2
40 Social Policy and Administration	1,773.1	68.4	1,212.8
13 Psychology	2,871.4	64.4	1,849.2
68 Education	5,094.5	42.5	2,165.2
43 Business and Management Studies	6,049.0	45.8	2,770.4
Total	25,097.2		13,688.6

Where are the social scientists to be found?

The HESA datasets do not easily yield information on the types of institution, or the geographical distribution of academic social scientists. Other overviews are not always helpful. For example, the division between pre-1992 and post-1992 universities is not addressed systematically in the *Great Expectations* report, for example.

The 2001 RAE submissions show that there is a great deal of social science research activity in the post-1992 institutions. But the submissions also show that research activity in different subjects is quite unevenly distributed between pre-1992 and post-1992 universities. In 2001 only 5% of Anthropology UoAs were in post-1992 institutions, compared to 16% for Linguistics, 36% for Psychology, 39% for Social Policy and 48% for Management and Business Studies.

For our survey we worked from lists of Heads of Departments supplied by professional associations and learned societies. In total we received 89 responses from post-1992 institutions (27%). These were strongly skewed towards Psychology and Business Studies, with other strong sets of responses from Cultural and Media Studies and broadly Criminological centres. The post-1992 responses also contained a higher proportion of returns from inter-disciplinary schools and centres and relatively few from more traditional discipline-based departments.

Finally, the ESRC's own internal monitoring of its expenditure shows a strong concentration of social science activity in the 'old' universities. In 2004-5 just 5% of research expenditure and 3% of training expenditure went to post-1992 institutions. In the distribution of quota awards in 2003, only two post-1992 institutions received quotas, and together they accounted for just over 1% of the awards distributed.

So in institutional terms, social science research remains concentrated in the 'old' universities, although the 2001 RAE indicates substantial amounts of research being done in post-1992 institutions in subjects like Psychology and Business, and this is also reflected in the responses to our survey. But the survey also highlights the relative low 'disciplinarity' in the organisation of social science in the new universities, a factor which may partly explain their low levels of success with ESRC training initiatives which remain predominantly disciplinary in their structure and presuppositions.

Students

Much recent public debate about the 'health of the disciplines' in UK Higher Education has focused on the closure of undergraduate courses, rather than on the presence and absence of research activity. This report concentrates instead on the latter. Student numbers are a relatively minor concern, except in so far as they impact on research capacity in the social sciences.

At undergraduate level, the social sciences in general were major beneficiaries of the expansion of access to UK Higher Education in the first half of the 1990s. If we want a fuller understanding of the make-up of the existing academic population we probably need to concentrate less on the generation first hired in the late 1960s and early 1970s, and now entering retirement, and rather more on the large cohort who entered academic employment in the first half of the 1990s. The undergraduate-led expansion at that time, modified by RAE-driven hiring preferences over the following years, established many of the contours and configurations of the social sciences as we now find them.

Unfortunately that story is not especially easy to trace in the most accessible secondary data sources. The HESA website provides useful data on student numbers by subject, but only from the mid-1990s onwards. The Commission on the Social Sciences 2003 *Great Expectations* report (Figure 10.6) uses this data to provide subject-by-subject histograms of overall student numbers from 1996-97 to 2001-02. These show that for the most part the expanded undergraduate recruitment of the early 1990s has been consolidated and maintained, with marked growth in postgraduate numbers in many subjects. The most obvious potential 'crisis subjects' are Social Policy, which saw a 35% drop in undergraduate numbers in this five year period, and Economic and Social History, which also saw a pronounced fall.

The *Great Expectations* report also provides a detailed summary of the changing shape of PhD production across the disciplines, which we reproduce here as Table 2.5 (Commission 2003 Table 10.11)

Table 2.5 Numbers of PhDs gained in British HEIs by subject of study and domicile

1994-1995				2000-2001					% growth 1994/95 to 2000/01
	Total	UK nat.	%UK nat.	Total	UK nat.	Other EU	Other Overseas	%UK nat.	
Social economic & political studies									
Economics	164	62	37.8	279	79	82	118	28.3	70.1
Sociology	62	42	67.7	197	131	13	53	66.5	217.7
Social policy & administration	22	15	68.2	76	48	5	23	63.2	245.5
Social work	5	4	80.0	32	28	2	2	87.5	540.0
Anthropology	42	16	38.1	81	35	12	34	43.2	92.9
Psychology (without significant element of biological science)	15	12	80.0	68	57	5	6	83.8	353.3
Geography (unless solely as a physical science)	57	40	70.2	101	57	17	27	56.4	77.2
Balanced combinations within social, economic & political studies (excl. law)	24	9	37.5	26	12	2	12	46.2	8.3
Politics	87	34	39.1	238	104	32	102	43.7	173.6
Other social studies	23	14	60.9	66	38	8	20	57.6	187.0
Social economic & political studies total	501	248	49.5	1,164	589	178	397	50.6	132.3
Law	76	27	35.5	192	77	26	89	40.1	152.6
Business & management studies	181	107	59.1	426	215	66	151	35.4	150.0
Humanities									
History	166	94	56.6	319	211	27	81	66.1	92.2
Economic & social history	10	6	60.0	24	17	3	4	70.8	140.0
Education	170	106	62.4	565	366	33	166	64.8	232.4
Grand total of social science subjects	1,102	587	53.3	2,694	1,473	333	888	54.7	144.5

Source: ALSISS 2003 Table 10.11, after HESA

The really striking point about these figures is the scale of growth in social science PhDs. Across the board the growth is 144%, with subjects like Education, Sociology and Social Policy (pace its crisis at undergraduate level) more than trebling the total number of PhDs awarded in a period of just 6 years.

Within this pattern of overall growth there are still clear winners and (relative) losers. If we leave aside some of the less significant HESA micro-disciplines, we can see impressive rates of growth in Social Work (from a very small base), Psychology, Sociology, and Social Policy. Rates of growth have been much smaller in Economics and Geography. While some of the growth has been caused by increased recruitment of non-UK students, the proportion of PhDs awarded to UK nationals across the sector has actually risen slightly. In Economics, though, the proportion has fallen to just 28% (although even in this case there has still been a 27% rise in the absolute numbers of UK-domiciled PhDs).

We do not have data for current PhD activity, although the submissions for the 2005 ESRC Recognition Exercise should provide some useful indicators for recent changes across subjects. The introduction in 2002 of the ESRC's '1+3' studentships prompted a 55% growth in applications to the competition, an expansion presumably accounted for by the numbers who in the past might have applied directly to the Masters courses now subsumed within the new scheme. However, in Economics the increase in ESRC competition applications in 2002 was a spectacular 133%. Anecdotal, this

has been accounted for by the post 9/11 downturn in the financial sector, prompting more holders of undergraduate degrees in economics to stay in academia, at least in the short term. It will be very interesting to see from the Recognition Exercise data if this apparent revival in the fortunes of Economics has continued.

The Demographic Profile of the Social Sciences

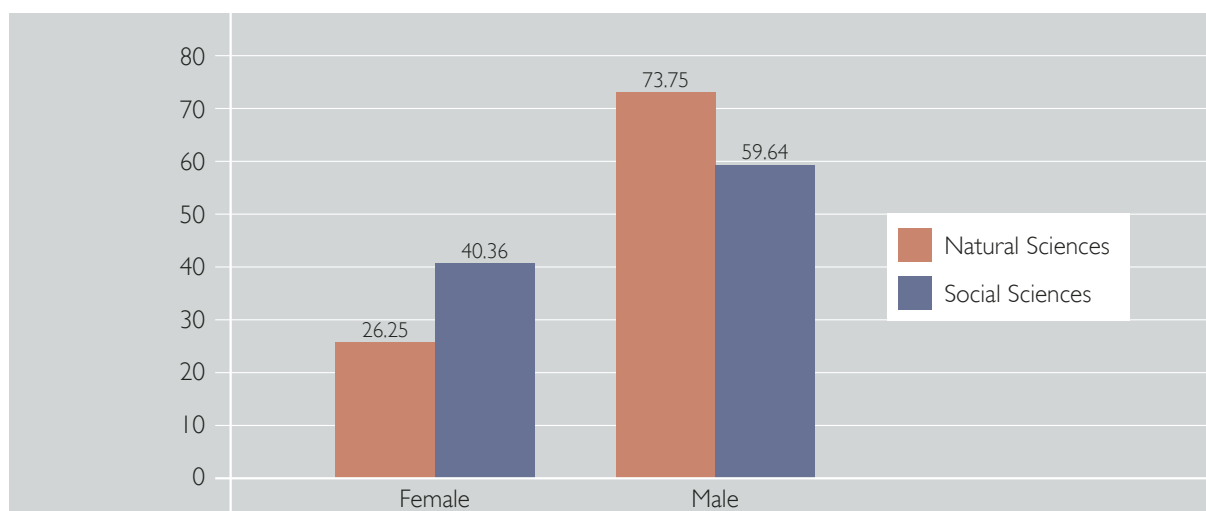
What do the national datasets tell us about the demography of the social sciences as a whole? The evidence we commissioned from HESA included figures for selected science disciplines, which can be used as a comparison to assess just what is distinctive about the shape of the social sciences. As the tables that follow show, the social sciences are older, have a higher proportion of women, and much lower proportions of researchers and staff on fixed term contracts. But we go on to argue that the disciplinary differences within the social sciences on these indicators are so great that this kind of broad contrast is of rather limited value.

In the figures that follow the columns for Natural Sciences aggregate figures for Biology, Chemistry, Physics and Earth Sciences: a population of 13,652. The Social Science population is a maximal version, including Psychology, Town and Country Planning, Geography, Law, Anthropology, Economics and Econometrics, Politics and International Studies, Social Policy and Administration, Social Work, Sociology, Business and Management Studies, Accountancy, American Studies, Middle Eastern and African Studies, Asian Studies, Linguistics, History, Communication, Cultural and Media Studies, and Education. It therefore also includes some areas of overlap with the natural sciences and the humanities. Use of RAE figures would probably have exaggerated gender disparities.

In Figure 2.1 we compare the gender balance in social science and natural science academic staff. Although in both cases males outnumber females, the difference is rather more marked in the natural sciences (74:26) than in the social sciences (60:40).

Figure 2.1 Gender Profiles of Natural Sciences and Social Sciences

HESA Staff Record 2003/4



Next in Figure 2.2, we compare the proportions of permanent and temporary staff in natural science and social science. Here the social sciences have a far greater proportion of permanent staff (73%) than the natural sciences (27%). However trend data shows that there has been a gradual increase in the use of fixed-term contracts in the social sciences between 1994/5 and 2002/3 – up from 23% in 1994/5 to 27.5% in 2003/4. At the same time their use in the natural sciences has declined by a similar amount. Given a commitment by University employers to reduce the number of staff on such contracts, and the insecurity they create, this trend raises some concerns.

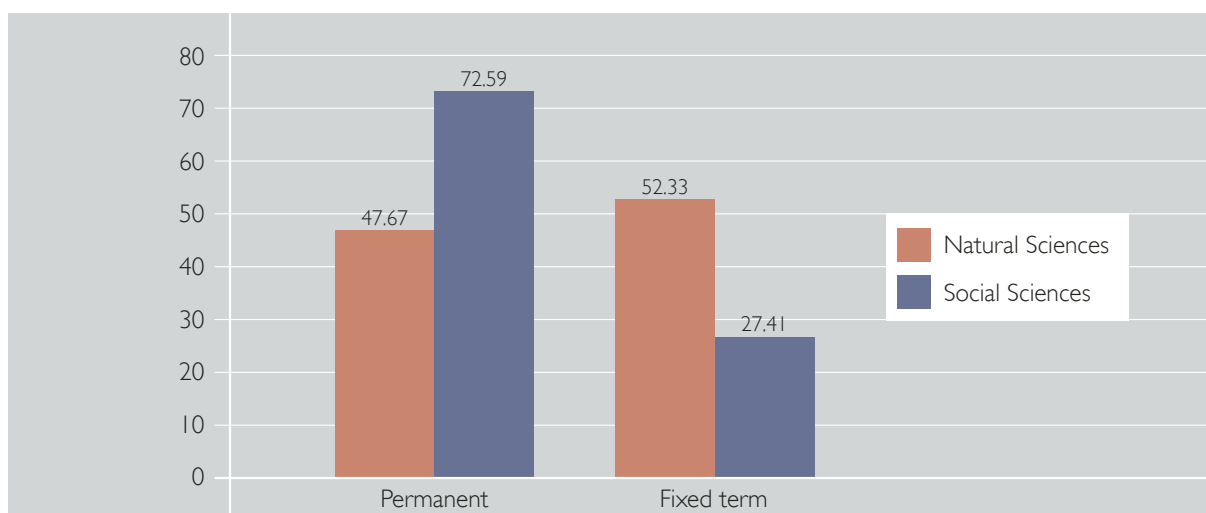
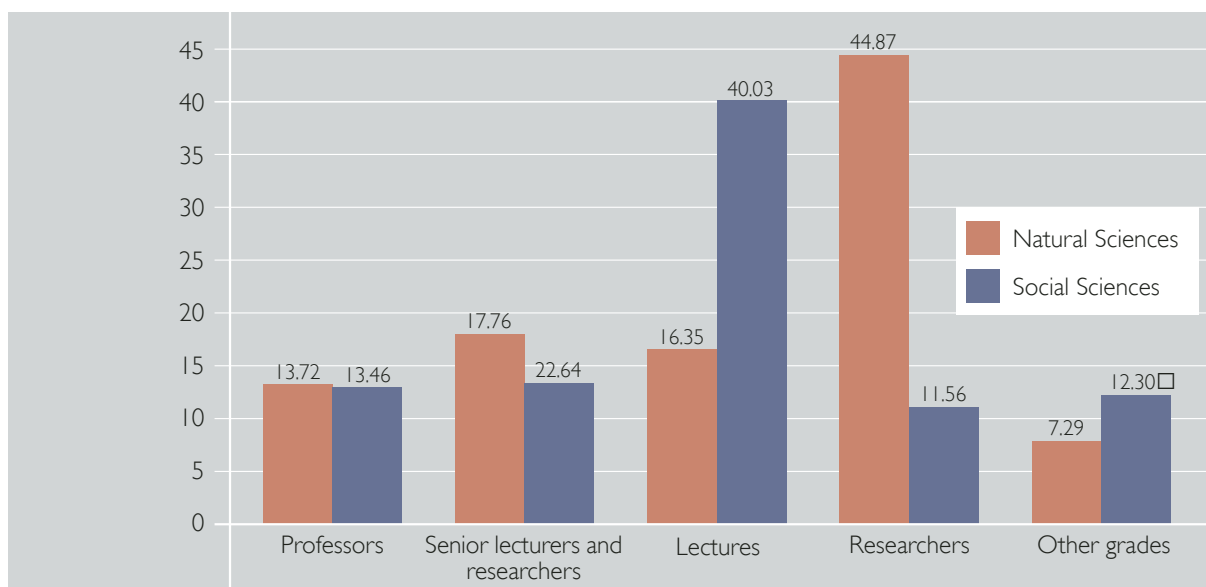
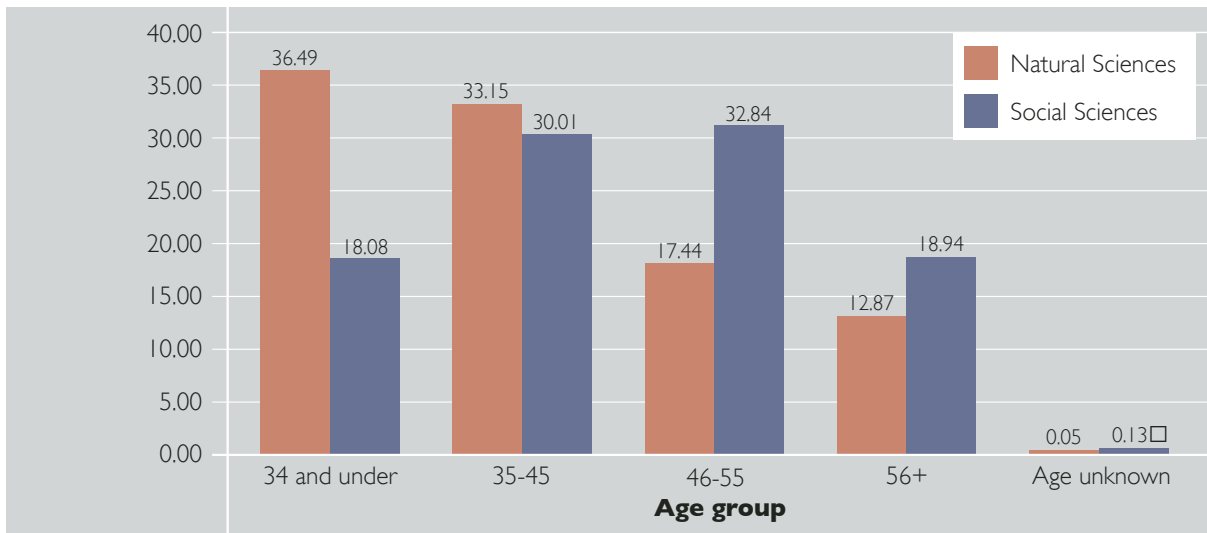
Figure 2.2 Terms of employment profiles of Natural Sciences and Social Sciences**HESA Staff Record 2003/4**

Figure 2.3 shows that, while the proportions of senior academic staff (Professors, Senior Lecturers) are similar in the two areas, there is a far higher proportion of lecturers in the social sciences, and a far lower proportion of researchers.

Figure 2.3 Grade profiles of Natural Sciences and Social Sciences**HESA Staff Record 2003/4**

Finally, Figure 2.4 shows how academic social scientists as a whole are more likely to have an older age profile than natural scientists. Staff are more concentrated in the 46-55 and 56+ age bands, with only half the proportion of researchers in the 34 or under category of that found in the natural sciences. While these figures as a whole need to be interpreted with caution in terms of the strategic problems posed for specific disciplines in the social sciences (see below), they do demonstrate quite starkly the difference between the social science and natural science population.

Figure 2.4 Age profiles of Natural Sciences and Social Sciences**HESA Staff Record 2003/4**

So what have we learnt? Compared to the natural sciences, the social sciences are older; more female, with much lower proportions of researchers but high proportions of lecturers. The science population profile is dominated by younger, predominantly male researchers, many of them on fixed-term contracts. Academic social scientists are likely to be older lecturers or senior lecturers, and employed on a permanent basis. The natural science columns tell of a world in which PhDs are started and finished by someone in their twenties, often followed by a long period of relatively insecure research work. Relatively few researchers end up in permanent lectureships. While some social scientists follow a similar research-led career; rather more do not. But beneath the broad contrast in the charts, there is a more complex story to be told about different kinds of research career in the different social science disciplines.

Key Findings

- The size of the academic social scientific community in the UK is somewhere between 14,000 and 30,000 staff. The lowest estimate is based on research-active staff in the 'core' social sciences, whilst the highest estimate includes all academic staff teaching and researching in all social-science related disciplines.
- Compared to the natural sciences, social science staff are older, and there is a higher ratio of women to men. There is a lower proportion employed on researcher grades and a higher proportion of lecturing staff. The natural sciences tend to have a younger age profile, are predominantly male, with high numbers of researchers, many on fixed-term contracts.
- The proportion of staff on fixed-term research contracts in the social sciences has increased in the last 10 years. In the same period the proportion has declined in the natural sciences. Given the commitment by universities to reduce the use of such inherently insecure contracts, this aspect of the move towards a natural science research model is a concern.
- There has been a significant expansion in research postgraduate activity in the social sciences. In a period of six years from 1994/5 to 2001, there was a 50% growth in PhDs awarded across the social sciences, with subjects like Education, Sociology and Social Policy more than trebling the total number of PhDs awarded in their fields.
- The survey highlights the relative low 'disciplinarity' in the organisation of social science in the post-1992 universities. Many of these are organised as schools linking cognate disciplines rather than as sets of individual academic disciplinary departments. This may explain their limited success in accessing ESRC funding for training initiatives, as these remain predominantly disciplinary in their structure.
- There is a great deal of social science research activity in the 'new' post-1992 institutions. Yet disciplines are quite unevenly distributed between the two sectors. In 2001 only 5% of Anthropology staff were in post-1992 institutions, compared with 16% of Linguistics staff, 36% for Psychology, 39% for Social Policy and 48% for Business Studies. In 2004-5 just 5% of research expenditure and 3% of training expenditure went to post-1992 institutions.

**‘Early in our work on this review we came across a puzzling
discrepancy between different HESA datasets’**



3 Defining disciplines

Introduction

One of the problems with defining the social sciences is that each of the funders of UK university research and teaching draw their own rather different maps of the disciplines. For the purposes of this review, we begin with the ESRC's own definition of the social sciences. We go on to show the limits of any set of classifications for comprehending inter-disciplinary and multi-disciplinary work.

In its 2005 Recognition Exercise, the ESRC has divided the social sciences into 19 disciplines, to be assessed by 18 panels of subject specialists. (Criminology has separate Training Guidelines, but is for the time being still being assessed with Socio-Legal Studies.) Some of these disciplines map un-problematically onto clear academic entities, and have been stable categories for several decades. Others are newer additions to the ESRC defined categories, the most recent being Social Work, Demography and Criminology.

Table 3.1 Relationship of ESRC disciplines and RAE categories

ESRC Discipline	Corresponding RAE UoA	Boundaries with other Research Councils
Area & Development Studies	Development Studies sub-panel of Geography in 2001; separate UoA in 2008. Area Studies distributed across 4 sub-panels within Panel L in RAE 2008, although the bulk of work in each sub-panel humanities rather than social sciences	Substantial overlap with AHRC, also possibly with NERC in resource management/ environmental aspects of Development Studies
Economic & Social History	Part of larger History UoA	Overlap with AHRC
Economics	Own UoA	None
Education	Own UoA	None
Human Geography	Part of larger Geography UoA	Overlap with NERC and (Cultural Geography) AHRC
Linguistics	Own UoA	Overlap with AHRC, EPSRC, and occasionally MRC
Management & Business Studies	Own UoA	Overlap with EPSRC and other science councils
Politics & International Relations	Own UoA	Some overlap with AHRC (Political theory)
Planning	In Town and Country Planning UoA	None
Psychology	Own UoA	Overlap with MRC, BBSRC
Social Anthropology	Part of larger Anthropology UoA (includes biological)	Some overlap with AHRC
Social Policy	Own UoA	None
Socio-Legal Studies	Part of Law UoA	Overlap with AHRC
Sociology	Own UoA	None
Statistics, Computing & Methodology	Runs across several	Overlap with EPSRC
Science, Technology and Innovation Studies	Some in Sociology	Overlap with several science Research Councils
Social Work	Own UoA	None
Demography	some in Sociology	Overlap with EPSRC and MRC
Criminology	Part of Law	None

The statistical problem is that many of the ESRC disciplines fall under more than one Research Council. A small number of central disciplines map relatively straightforwardly onto categories used in the collection of other HE statistical data – Sociology, Economics, Politics, Management and Business Studies. But others straddle the concerns of different Research Councils, with ESRC dealing with a subset of total activity within the discipline – Psychology, Linguistics, Economic and Social History (within History), Human Geography (within Geography). Still others are quite idiosyncratic to ESRC and are more or less invisible in national datasets: Science and Technology Studies, and Statistics, Methods and Computing for example. The problem is compounded by the explicit (and entirely laudable) reluctance to draw too tight a boundary round ESRC's concerns: for example, the ESRC/AHRC Joint Statement on Subject Coverage sensibly acknowledges significant overlap between the two Councils' concerns so as to avoid the danger of applications falling into a 'gap' between the two.

Table 3.1 provides a summary of the relationship between ESRC's disciplines and RAE categories, with an attempt to indicate overlaps with other research councils.

Importer and Exporter Disciplines

There are several ways of mapping social science staff using HESA data; by their discipline of highest qualification (JACS codes), by their cost centre (e.g. Business Studies, or Education and Social Studies), or by their designated RAE unit of assessment (UoA). We have already argued that the last method is the most robust, and offers the most detail, for the purpose of this review.

Early in our work on this review we came across a puzzling discrepancy between different HESA datasets. We sought to calculate the total number of staff within each disciplinary unit of RAE submission in 2001 by scaling up the number of research-active staff each institution submitted, drawing on the percentage of all staff in that institution that this group represented. The resulting population totals sometimes differed starkly from those recorded by HESA JACS data for 2000/1. The total staffing figures we calculated using RAE data correlated far more closely with national HESA UoA data for that year.

In Table 3.2 we compare academic staff numbers according to these different methods of counting (unit of assessment (UoA) and JACS code). It shows that for one discipline, Politics, the two modes of counting tally neatly. For others, the RAE or UoA populations are far bigger than the JACS-derived populations (Business, Education, Social Policy, Social Work, Town and Country Planning). For a third set, the JACS population far exceeds the RAE or UoA count (Psychology, Sociology, Economics and Anthropology).

Table 3.2 Importer and Exporter disciplines in the social sciences

HESA Staff Record 2003/4

Unit of Assessment	Staff Totals		
	2003/4 RAE UoA	2003 JACS	Exporter(+) Importer(-) %
42 Sociology	1,400	3,179	+127
37 Anthropology	331	667	+102
38 Economics and Econometrics	1,531	3,112	+103
13 Psychology	2,871	4,586	+60
56 Linguistics	575	931	+62
39 Politics and International Studies	1,407	1,352	-4
41 Social Work	813	689	-15
35 Geography	1,760	1,251	-29
34 Town and Country Planning	678	380	-44
43 Business and Management Studies	6,049	3,688	-49
40 Social Policy and Administration	1,773	871	-51
68 Education	5,095	2,297	-55
Total	25,097	23,003	

How does one account for the discrepancies? JACS data tells us about where people did their PhDs or Masters degrees, rather than where they now work. So it over-estimates the number of staff in Economics, Psychology and Sociology departments, whilst under-estimating staff in Education and Management and Business Studies. This is because many of those with PhDs in the 'older' social sciences go on to take jobs in Management and Business Studies or Education.

We have called the disciplines with bigger RAE populations than JACS populations 'importer' disciplines, and those with bigger JACS than RAE populations 'exporter' disciplines. Yet to what extent might the discrepancy between the JACS and UoA staffing figures be an artefact of HESA's data gathering, or a consequence of strategic 'game-playing' for RAE purposes? Anecdotal evidence suggests that Sociology departments returned some staff to the Social Policy UoA, and that some Economists were returned to Management and Business Studies.

We have two separate data-sets that provide statistical support for our 'importer/exporter' model, along with extensive qualitative evidence on the phenomenon from our survey.

The first is data commissioned in 2004 by the Association of Business Schools on all staff employed within business schools. This shows that of the 10400 staff counted (bodies, not FTEs) employed in December 2003, only 4200 recorded their highest degree as being within the Management and Business Studies field. 1100 had their highest degree in Economics, 220 in Psychology and 250 in Sociology. There were even 21 Anthropologists employed in Business Schools. This is clear evidence that Management and Business Studies 'imports' academic staff from other fields. Further evidence on this is given in the case-study for this discipline.

We also have independent evidence for one 'exporter' discipline, Social Anthropology. We know that around 350 staff are employed in the 22 departments of Anthropology, a figure that tallies closely with HESA UoA data. Spencer, Mills and Jepson's ESRC-funded research on the careers of UK-trained social anthropologists traced individual employment histories for most of the 750 people who completed PhDs between 1992 and 2003. Of this group 230 currently hold teaching jobs in UK HE – 120 within the discipline, and another 110 outside Anthropology. In this period the number of people appointed to social anthropology lectureships with degrees in other subjects was minimal. This pattern of equal numbers of anthropology graduates being employed inside and outside the discipline fits closely with HESA data.

We are confident that, despite RAE game-playing, the 'exporter/importer' analysis is a robust model of post-training migration between disciplines. The pattern is highly important for ESRC's future strategic decisions about effective investment in training. Assuming the pattern we describe is a stable one for the disciplines concerned, it may seem to make sense for ESRC to switch resources into exporter training, rather than investing in those disciplines apparently unable to reproduce their own research capacity by internal means.

But disciplines can appear as importers for other reasons too, such as a period of rapid expansion. In the 1960s expansion of social science, a significant number of new chairs in Sociology were filled by social anthropologists, a situation that was unlikely to recur once the new Departments of Sociology started to produce their own PhDs. And we cannot tell from the figures alone how much the disciplinary migrants freely choose to move into new fields, and how much they accept a position in, say, Management and Business Studies as a second-best in the search for an academic career in their original discipline. Finally, ESRC must also consider the argument that, whatever the historical pattern; areas like Business and Education need to develop their own pool of researchers whose primary loyalty is to Business and Education, rather than to Economics or Psychology. There is an inevitable trade-off to be made between quality and long-term strategy.

Nevertheless, these figures – like the differential rates of research active staff calculated in the previous chapter – have two broad implications. They demonstrate again the internal heterogeneity of the different social science disciplines. And they raise further problems for any attempt to assign a simple numerical index of volume across the ESRC disciplines.

There is one further level of complexity to add. Increasingly universities are seeking to consolidate and bring together cognate disciplinary departments within multi-disciplinary schools. This is often done for reasons of administrative coherence and financial efficiency. The trend is most apparent in post-1992 institutions, as these have historically invested less in disciplinary power-structures, and is visible in the titles of the schools of social science responding to our survey. In many cases these new meta-disciplinary administrative structures rest uneasily alongside, rather than complementing or reshaping, existing disciplinary identities of staff.

Comparing the Disciplines

The following graphs of staff numbers bring this internal heterogeneity further into focus. Based on the same datasets used to contrast the social sciences and natural sciences in the previous chapter, they provide a disciplinary breakdown by size, age, employment function, terms of employment and gender. We have included Physics (second column from the left) in each graph as a representative natural science.

Disciplinary staff numbers and age profiles

The most glaring variation in the social sciences is in their relative size. As the previous chapter demonstrated, the smallest disciplines are one-twentieth of the size of the largest. Figure 3.1 below shows how staff numbers vary in each subject area. Business and Management is the largest with just over 6000 permanent and fixed-term staff. Even this may be a significant under-estimate of staffing in Business Schools, as a proportion of their staff will be returned to other RAE panels (see the Management and Business Studies case study below). Education is the other 'big' discipline, with around 3500 permanent staff and 1500 fixed term employees. Is there a typical discipline? Several fields have around, or just above, 1000 permanent staff, including Sociology, Social Policy, Politics, Economics and Geography.

Figure 3.1 HESA Staff record 2003/4 by selected UoA Staff Numbers

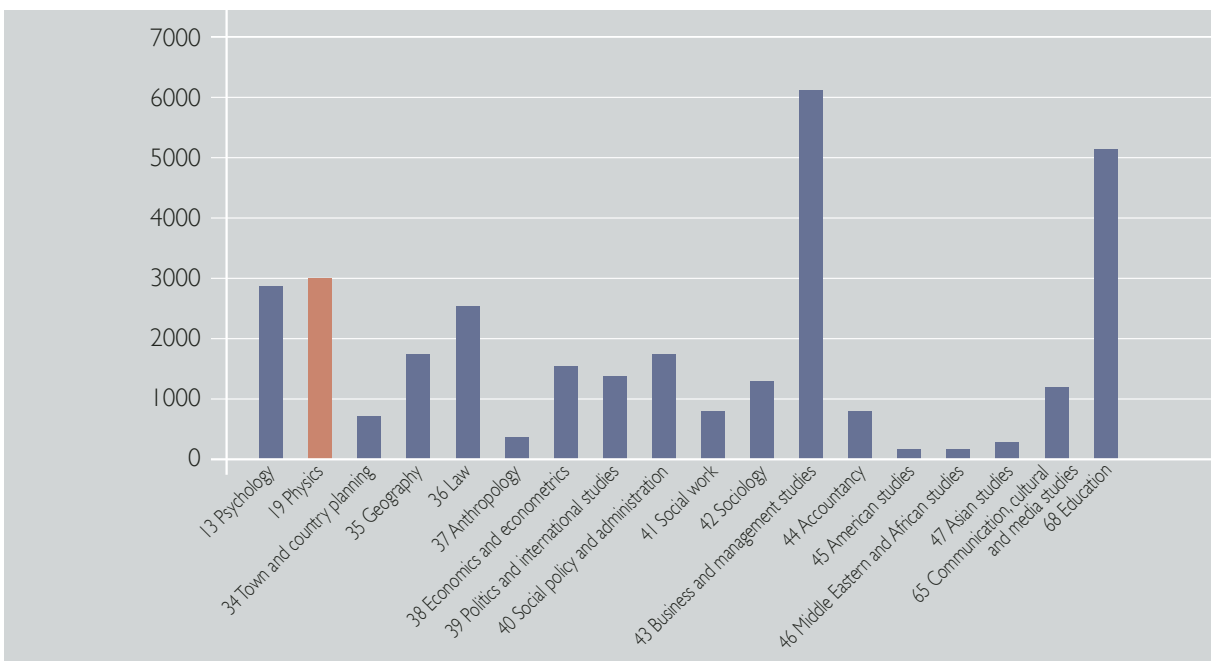
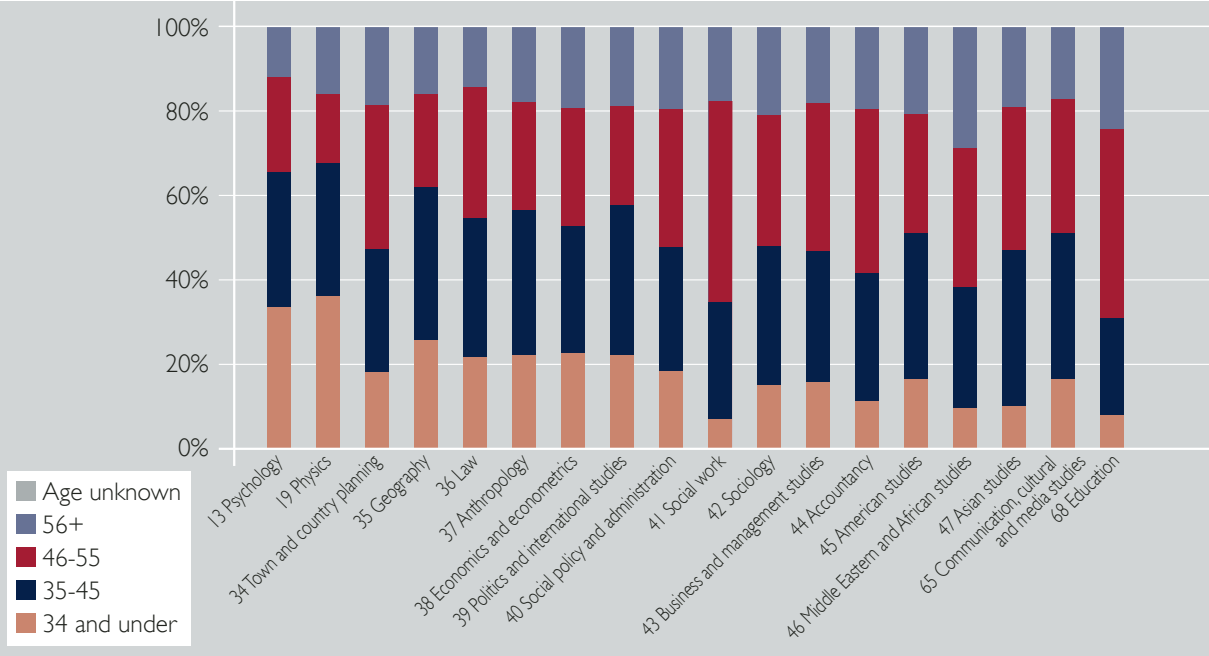


Figure 3.2 disaggregates HESA data on the social sciences into the proportions of staff within four broad age-bands (up to 35, 36-45, 46-55, and 56+) Two things are immediately apparent. The first is that Physics has a relatively younger age profile than most of the social sciences, and is only matched by Psychology. The second is that Education stands out as having more than 70% of staff aged over 45. We return to these profiles in the next chapter.

Figure 3.2 HESA Staff Record by UoA 2003/2004: Age Bands



Terms of Employment

The next chart (figure 3.3), aggregating the various teaching and research staff grades in the old and new universities, shows proportions of research staff across the social sciences. Like the other natural sciences, Physics has a very large constituency of staff on research contracts, making up more than a half of all staff. In some of the social sciences this figure is very much lower, reflecting a very different career trajectory. Young scholars are less likely to hold short-term research posts, and instead may hold a series of fixed-term teaching posts before being offered a permanent job. This is reinforced in the comparison of proportions of staff on fixed-term contracts (figure 3.4).

Figure 3.3 HESA Staff record by UoA: Academic employment function

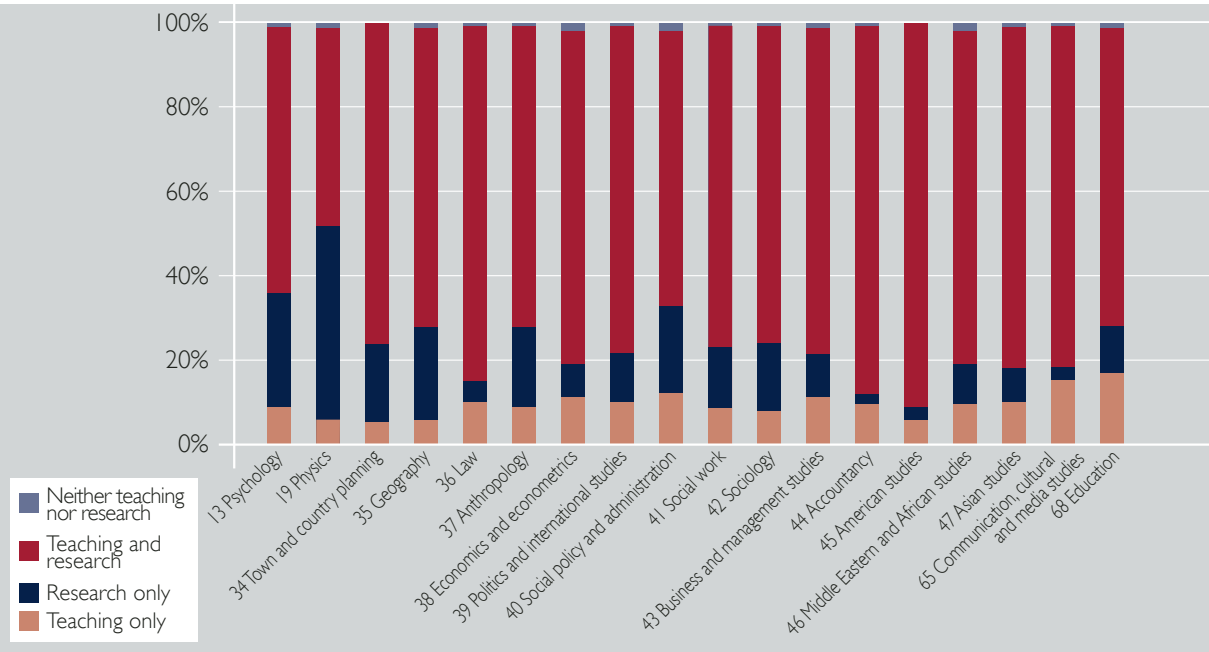
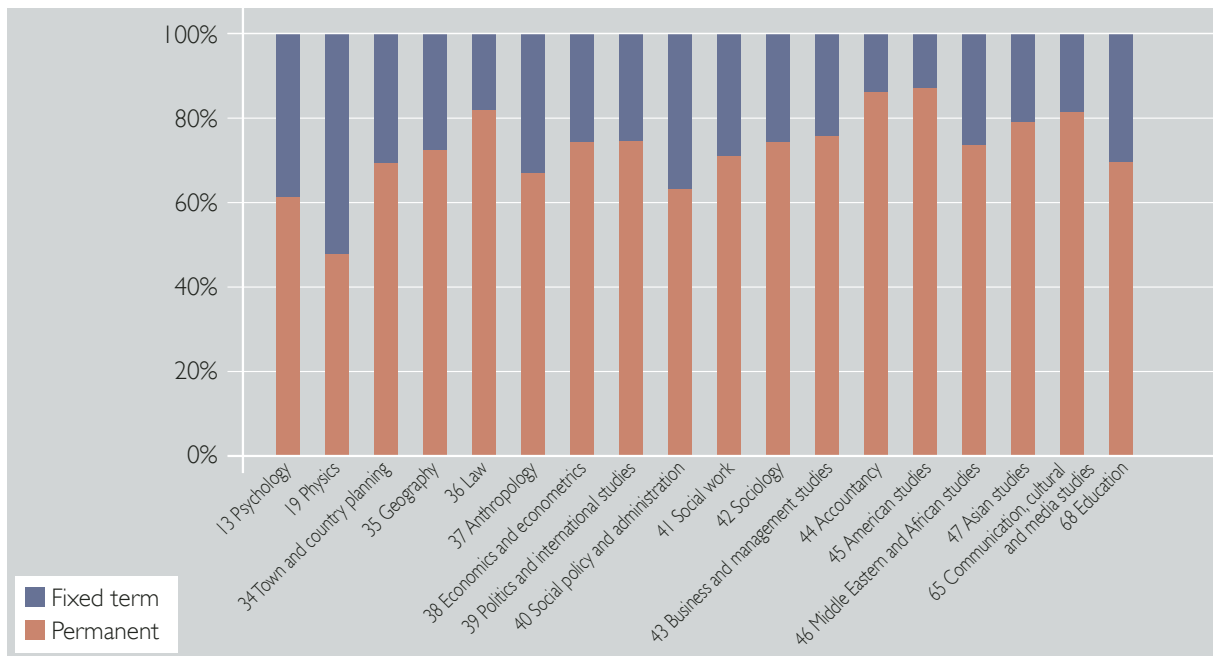


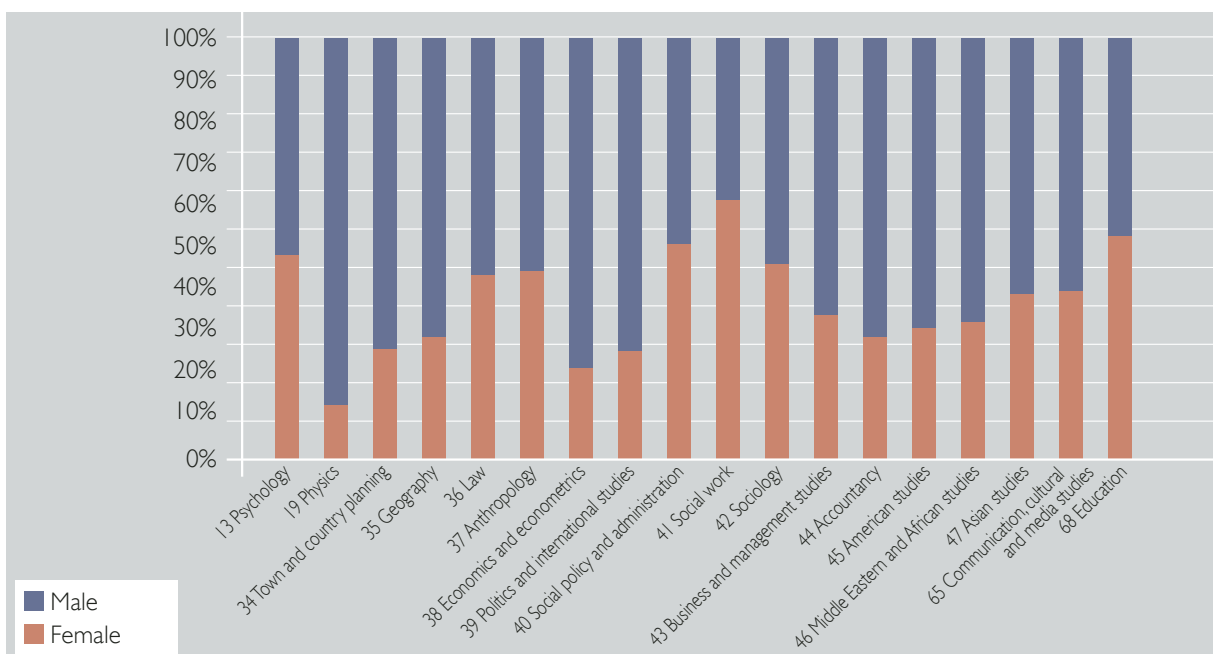
Figure 3.4 HESA Staff Record by UoA: Terms of Employment

Communication, Culture and Media Studies has the smallest number of research staff, whilst Economics, Business Studies and Area Studies each have less than 10% of staff on researcher-grade contracts. In the case of Economics, the proportion of research-grade staff has actually dropped by a third since 2000. On the other hand, Anthropology has 20% junior research staff and post-doctoral fellows, whilst Psychology has more than 30%.

One final point; whilst we do not include a separate graph on academic grades, the trend from 2000/1 to 2003/4 has been for an increasing proportion of staff in senior lecturer and professorial grades. This is a reflection both of aging within the disciplines and internal promotion and salary progression to ensure staff retention.

Gender and Employment

As one would expect to see, there are significant differences across disciplines by gender (Figure 3.5).

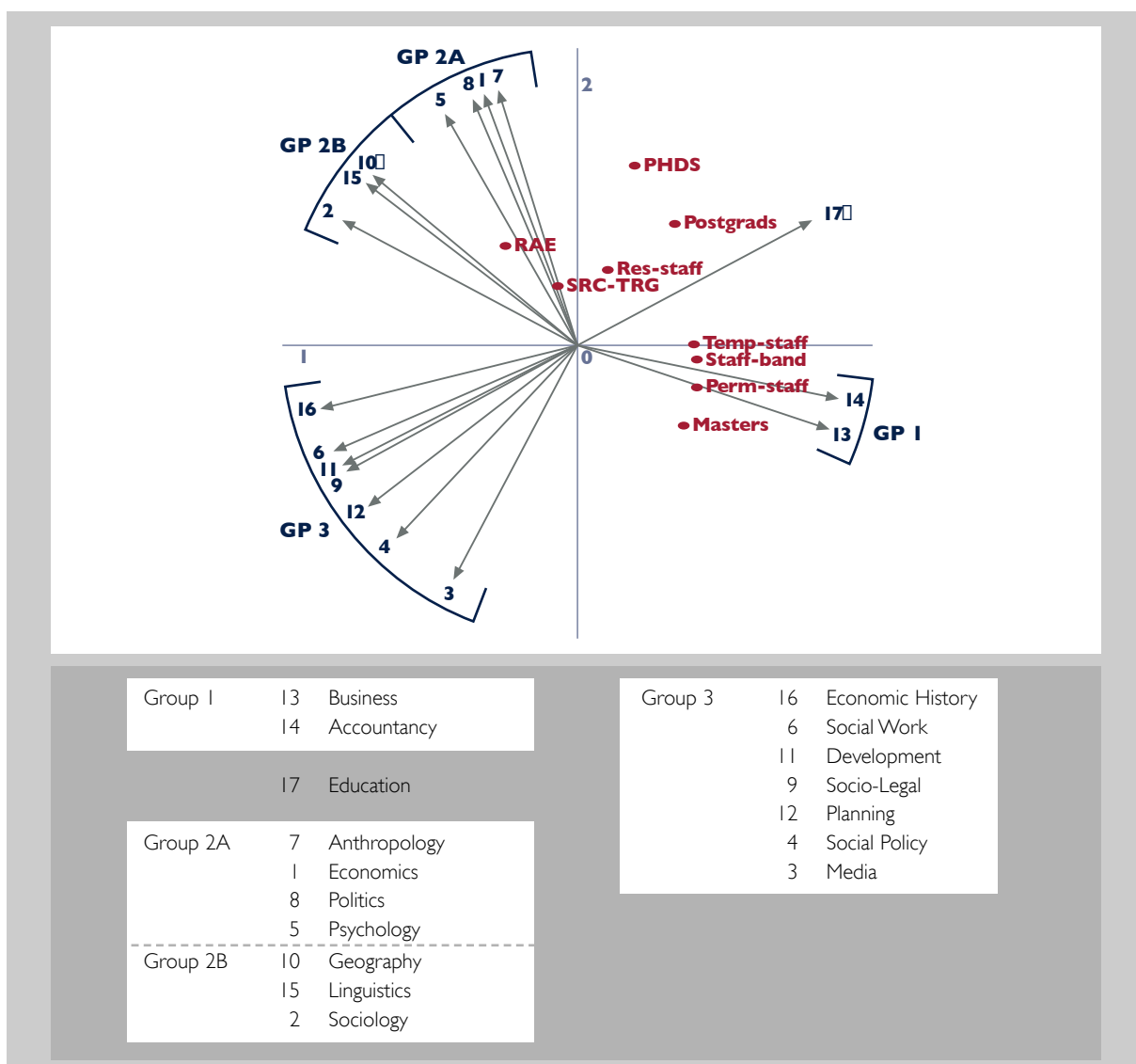
Figure 3.5 HESA Staff Record by UoA: Gender

Several disciplines are strongly gendered – 60% of all staff in Social Work and Linguistics are female, as opposed to only 22% in Economics and 24% in Politics/International Relations. Education, Psychology and Social Policy are the other disciplines to have 50% or more female staff. There is a slow but gradual shift in the gender composition of staff across all the disciplines, amounting to a 2-/3% increase in female staff since 2000/1. In terms of their gender composition, most of the social sciences compare favourably with the natural sciences. By comparison, history is surprisingly male-dominated, with only 30% female staff.

Focussing on staff under 35 one finds a yet higher proportion of female staff. The proportion in Social Policy reaches 80%, and 70% in Linguistics. However some of these staff are on fixed-term contracts, and this does not necessarily translate into a longer-lasting change in gender profiles. So whilst half of all Economics researchers under 35 are women, only 1 in 4 of those holding permanent lectureships in Economics is female.

What conclusions can we make from these four charts? Can one neatly arrange the social sciences in a spectrum between the natural sciences and the humanities? At first the charts seem to confirm this. The graph of proportions of teaching and research staff shows Geography and Psychology to be more akin to Physics, whilst Law has a low proportion of researchers. The same is true of employment status, with Psychology showing more similarity to Physics, with a high proportion of temporary staff, than to Law. But other variables complicate this picture. On gender, Psychology is very different from Physics, with a more balanced gender profile, along with Social Work and Education. On the other hand, Politics and Economics show a more natural science-like preponderance of male staff.

Figure 3.6 Two Dimensional Bi-Plot of Discipline Descriptors and Discipline Groups



Mapping the disciplines

In order to make some better sense of this emerging heterogeneity, we used the data from our survey of Heads of Departments to construct an exploratory model of the internal similarities and differences among the social science disciplines. From our survey, we aggregated figures on numbers of staff, Masters and PhD student numbers, PhD completion rates, RAE scores, and number of ESRC quotas or training outlets for each of the respondent disciplines. In order to remove the dominant size effect, these were then standardised and the results are shown in the bi-plot in Figure 3.6. (A more detailed account of the construction of this figure is provided in Appendix 2.)

First consider the disciplinary attributes (represented as points). A diagonal line drawn from the bottom-left to the top-right of the diagram separates the attributes into two major clusters:

- One cluster is concerned primarily with the preponderance of *Masters* course students (as opposed to PhD students) and the preponderance of teaching (rather than research) staffing (*Perm-Staff*, *Temp-Staff*, and *Staff-band*)
- Another more dispersed cluster is concerned with research accomplishment and training, PhD students and preponderance of research staff (*RAE*, *ESRC-Trg*, *PhDs*, *Res-Staff*, *Postgrads*).

Whilst these do not correspond directly to a teaching versus research contrast, there are elements of this division present.

Secondly, consider the disciplines themselves (each represented by a half vector). Broadly speaking the bi-plot divides the disciplines into four groups:

- GROUP ONE (Disciplines: *Business, Accountancy*) at “4 o’clock”. This group features consistently and repeatedly as a highly distinctive Group, which is markedly different to the other disciplines¹. Even when (as here) the main consensus profile has been taken out of the data, the profile is still hugely dominated by the number of Permanent and Temporary Staff, and by the number of Masters students
- GROUP TWO (Disciplines: see *groupings below*) at “10 - 12 o’clock”. These disciplines make up a central social science ‘research-focused’ cluster, at the opposite extreme to Management and Business Studies. They are often in autonomous departments with relatively smaller staff numbers and have fewer temporary staff. Their students are more typically PhDs than Masters. Although it forms a coherent group, it can be divided into two subgroups:
 - A: (Disciplines: *Anthropology, Economics, Politics-IR, Psychology*). These disciplines have distinctly fewer temporary staff and Masters students; Psychology has particularly high research staff, and Anthropology PhD completions.
 - B: (Disciplines: *Geography, Linguistics, Sociology*), with lower staff numbers (of all types)
- GROUP THREE (Disciplines: *Economic and Social History, Social Work, Development Studies, Socio-legal Studies, Town and Country Planning, Social Policy, Communications, Culture and Media Studies*), at “7 to 8 o’clock”. This large and heterogeneous group of disciplines contains both large and small disciplines, but they are primarily practice-oriented rather than research-oriented fields. They contrast with other disciplines in having considerably lower staffing of all sorts, and lower postgraduate and PhD numbers.

This analysis is intended primarily as a heuristic guide to the broader divisions between the disciplines that we explore in chapter 5, rather than as a definitive explanation. Note how closely the left-right division corresponds to the indices of RAE research activity (with low proportions of research active staff on the right-hand side), while the key ‘exporter’ disciplines are found in the top left quadrant, and the importers either lower down or on the right. In the bottom left, isolated by their shared distance from the clustered variables, are the disciplines with a strong interface with policy and practice – Social Work, Development Studies, Socio-legal Studies.

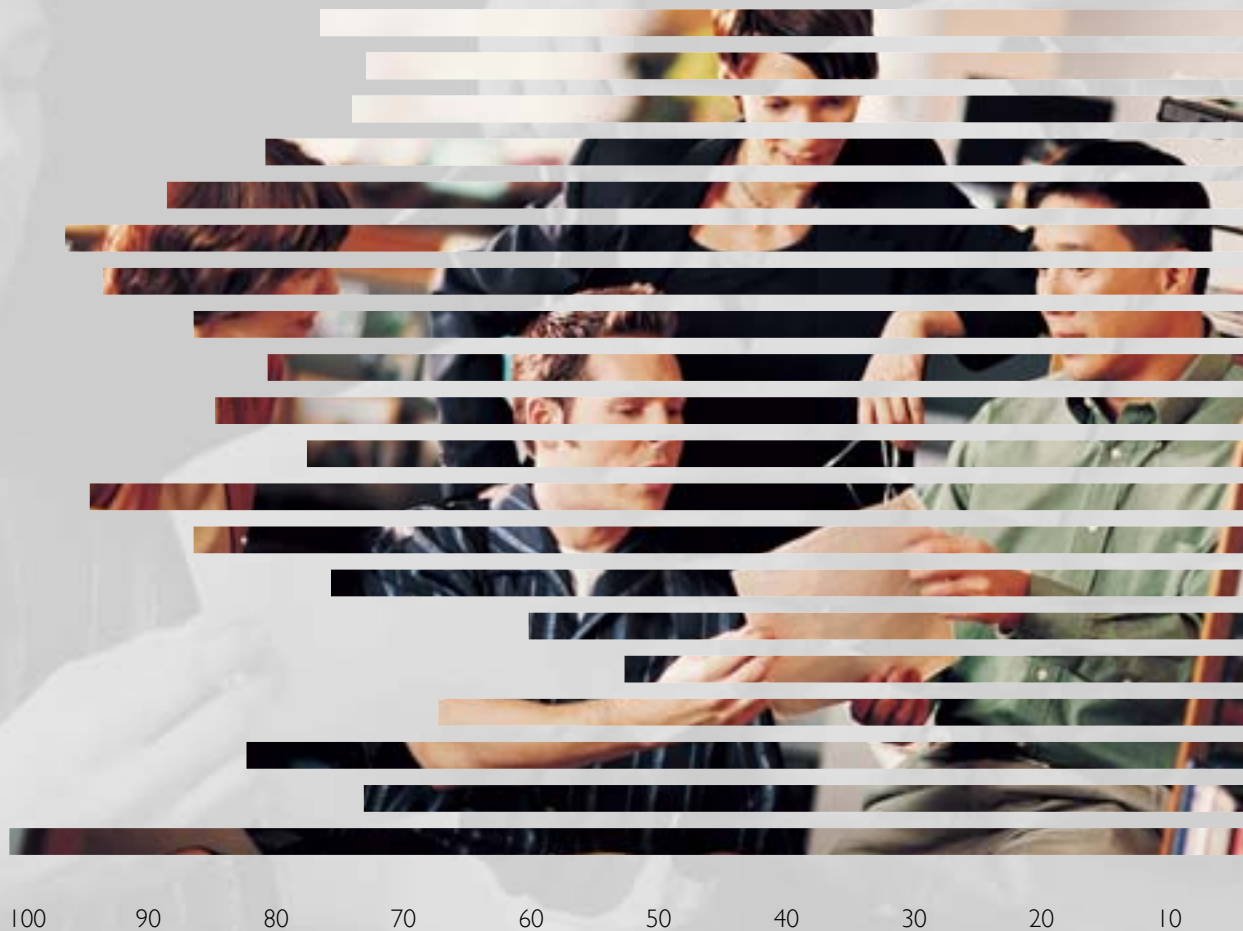
As the case studies in the next chapter show conclusively, the practice-oriented disciplines share similar structural problems in sustaining social science research capacity. Without investing too much in the model, the bi-plot could be used as a template for setting a strategic agenda. The ESRC should consider the different implications of supporting the traditional research-focused ‘exporter’ disciplines in Group 2, where any investment might be expected to yield a certain proportion of strong cross-disciplinary researchers in the future, or of investing urgently in the large right-hand disciplines, where the issue is in large part one of creating a research culture, rather than sustaining it.

¹ Business and Accountancy have a common extreme pattern: (the same) four out of the nine characteristics are extremely different to the other disciplines. This is true for no other disciplines (see Table 1B).

Key Findings:

- Each of the funders of UK university research and teaching has their own definition of the disciplines which constitute the social sciences.
- National-level data sets are particularly unreliable for the largest and smallest disciplines, for 'rendezvous' disciplines like Development Studies, Area Studies and Criminology, and for revealing new and emerging fields such as Socio-legal Studies. It is also difficult to firmly identify the social scientific ('ESRC') component of the larger disciplines like History, Geography and Psychology, and is perhaps not appropriate to attempt to do so.
- As a result, there can be no one definitive population figure for the different social science disciplines, especially those spanning the social and natural sciences (such as Geography and Psychology), interdisciplinary fields like Area Studies, or professional fields like Law. This makes a population-based allocation of funding resources impracticable.
- For the purposes of this review, counting staff by their designated RAE unit of assessment (research active or not) offers a more useful picture of where staff are located and the work they are doing than the standard classification of staff by their discipline of highest qualification (JACS).
- UK-level datasets reveal systematic differences between disciplinary populations, as classified by RAE unit of assessment, and as classified by the discipline in which individuals were trained. The simplest explanation for this phenomenon is that some social sciences export their students into other academic domains, while others depend on importing trained staff from outside the discipline. We classify some disciplines as 'exporter' disciplines and some as 'importer' disciplines, based on patterns of post-training migration between fields.
- Academic staff trained in the 'exporter' disciplines such as Economics, Sociology and Anthropology are often employed by 'importer' disciplines such as Education, Management and Business Studies, Town and Country Planning and Social Policy. In general, the research-focused disciplines tend to have relatively younger age-profiles, and to be net 'exporters' of PhD-trained academics into the more practice and policy-linked fields. This has important implications for the funding and content of research training.
- The social sciences vary greatly in size. Management and Business Studies is the largest with almost 7000 permanent and temporary staff. Education is second largest, with around 5000. Anthropology is one of the smallest, with just over 300 staff.
- The data on staff and student numbers from our survey of departments and centres allow us to cluster the disciplines into three broad types. Management and Business Studies, Accountancy and Education form one cluster, with high numbers of staff and taught Masters students in each unit. Anthropology, Economics, Politics and Psychology make up a 'research-focused' cluster (along with Geography, Sociology and Linguistics), often in autonomous departments with smaller staff numbers but high numbers of research students. A third cluster of more practice-oriented fields (Communication, Culture and Media Studies, Town and Country Planning and Socio-legal Studies) mediates between the two extremes.
- This classification resonates with the picture that emerges from our interviews. Academic disciplines which seek to recruit researchers with first-hand experience of professional practice outside academia ('practice-based disciplines') face different recruitment problems than more traditionally academic disciplines, for whom new academic staff could be recruited from a conventional first degree-Masters-PhD academic track ('research-based disciplines').
- The research-focused disciplines tend to have a significantly younger age-profile than the practice-linked disciplines. This is primarily the result of different career paths and recruitment patterns.
- There is also significant variation in gender and employment profiles. Social Work and Linguistics have 60% female staff, whereas Economics and Politics/International Relations have less than 25% female staff.

‘What do discipline-based academics see as the key challenges to the future ‘health’ of their research base’



4 The view from the disciplines

Introduction

We have shown how one can use national-level data to make sense of demographic trends, and to cluster the different social sciences into groups with similar attributes. In this chapter we combine the quantitative picture of the disciplines with a qualitative view *from* the disciplines, drawing on our survey returns, interviews and the secondary literature. What do discipline-based academics see as the key challenges to the future 'health' of their research base? What recommendations and suggestions do they have? We have prepared 18 case-studies, each discussing their disciplinary field in detail, highlighting our respondents' concerns and proposals. The report's general findings and recommendations need to be read in conjunction with these case-studies.

Practice-linked Disciplines

We begin with eight case-studies of fields that broadly fall under our rubric of 'practice-linked disciplines': Communication and Media Studies, Criminology, Development Studies, Education, Management and Business Studies (MBS), Socio-legal Studies, Social Work and Social Policy, and Town and Country Planning. They reveal a number of common recruitment, training and research capacity issues. These include the difficulty of recruiting academics with both professional practice and research experience, competition with the non-academic labour market, and unconventional entry routes into academic posts. Beyond their commonalities, each of the fields has its own distinctive demographic profile and relationship with professional practitioners.

Their dual identities as fields of academic research and areas of professional practice should be seen as a strength rather than a weakness, but one that makes the development of autonomous disciplinary research traditions and intellectual debates all the more vital.

Research-focused disciplines

We include nine case-studies for what can be broadly classified as the 'research-focused' disciplines and multi-disciplinary fields: Anthropology, Area Studies, Economic and Social History, Economics, Human Geography, Linguistics, Politics, Psychology and Sociology. Two are given particular attention: Economics, because of its reputation as a field with problems recruiting UK staff and retaining PhD students, and Area Studies, because of its strategic importance and inter-disciplinary remit. We end with a separate case-study on training and staffing in advanced quantitative methods, a concern across the ESRC disciplines.

These are all core ESRC disciplines, with at least two-thirds of their staff classified as research active in the last RAE. On the whole, concerns over research capacity and recruitment are limited in comparison with the practice-based case-study disciplines. Together they receive three quarters of ESRC studentships. The majority of replies to our survey are from departments in pre-92 universities, and several of the respondents from post-92 institutions call for a more equitable distribution of research resources. Our findings also point to the need for research into the strength of disciplinary identities and the role of such affiliations in sustaining particular intellectual approaches when working beyond one's home discipline.

Case studies of the practice-linked disciplines

Criminology

Within the field of Law, we consider the areas of Criminology and Socio-legal Studies separately. Two apparently closely related fields, they are quite distinctive in the research they do, the policy environment in which they exist, and the variety of institutional 'homes' they occupy. Criminology is currently burgeoning at the undergraduate level, while Socio-legal Studies remains a predominantly postgraduate field.

Criminology is a relatively young discipline. In the 1950s research was being done in a few institutions, such as the Cambridge Institute of Criminology, and was embedded firmly in Law schools. Within the UK, the field was radicalised in the 1960s by social scientific work, and has developed more systematically in that direction ever since. In much of the EU, Criminology remains more law-focused, with research still chiefly carried out in Law schools.

Criminology is peculiar as a social science. It has emerged from other social science subjects, remains firmly placed institutionally within social policy departments, sociology departments and law schools, but at the same time does much of its work across disciplinary boundaries. In post-1992 institutions, where a range of social science subjects are often grouped together, undergraduate courses in Criminology are flourishing. Pre-1992 institutions maintain their focus on postgraduate courses.

The main route into an academic career in Criminology is through training in a discipline such as Sociology, Social Policy and Psychology. Whereas in the past academics from Psychology, Sociology, Law and Psychiatry worked in parallel with little synthesis, subsequent generations have established Criminology as a truly multi-disciplinary field. The rapid growth of undergraduate courses, and the QAA-led benchmarking process have also helped in defining Criminology as a discipline in its own right. But such boundary-marking risks threatening the field's inherent interdisciplinarity.

Criminology can be seen as a 'rendezvous discipline', and its multi-disciplinary roots are seen as one of its greatest strengths. It is regarded by law schools as a useful 'bridging' discipline back to the social sciences. Conceptually Criminology sits well within the law curriculum, and balances the focus on the study of civil law in a way that Socio legal Studies does not. One respondent commented that Criminology even provides an *'escape route for students who have made a terrible mistake in choosing to do Law'*, down a more theoretical, social science-oriented avenue. Empirical and contextual research is seen as outside the interests of black letter lawyers, and is a new addition to the tradition of legal research.

Age, gender and nationality of staff

We had responses from nine departments², out of approximately thirty-two (28%) offering postgraduate courses in Criminology. Six of the nine were in post-92 institutions, and departments ranged in size from 7 to 75 academic staff. 80% were permanent staff. Some institutions made submissions to the Law unit of assessment but many criminologists range across disciplinary boundaries and are submitted to Sociology, Social Policy, Psychology and Social Work. The subject also attracts professionals from Social Work and the Probation Service, and appears to have a sensitive and functional relationship with practitioners that does not hold true in all policy and practice-linked fields.

National-level demographic data on Criminology is not available. From our own survey, relatively low numbers of staff aged 45 or over were being appointed in Criminology. There was a perception through the qualitative responses that there is a shortage of good quality senior staff. Whilst this is the case across the sector, this may be a particular problem for Criminology because of a period in the 1980s and early 1990s when its hybrid nature worked against its development. 73% of Criminology appointments in the last year were UK nationals (compared to a 63% average for all social sciences). Only one quarter of permanent appointments were women, against a 43% female recruitment rate across the social sciences. Only Economics and Social Statistics had lower rates of female appointments.

Funding concerns and emerging issues

Relative to the other subject areas, recruitment is seen as a problem for Criminology, especially at senior lecturer level and above. Some talked of a missing generation of academic staff who had sought posts outside academia in government departments and think tanks, and the Probation Service. Vacancies for at least five Criminology chairs have been advertised over the past few months.

Some point to a lack of *'clarity at the national level that recognises an important change in the social science landscape'*. The lack of visibility of Criminology as a discipline, in the eyes of the RAE, ESRC and HEFCE, is felt to have contributed to a shortage of research funding, *'especially in areas of multi-disciplinary concern'*, and restricted the establishment of a coherent research agenda. Funding opportunities at the postgraduate and post-doctoral levels were seen as a problem, as were salaries for junior and contract staff.

In Scotland, this is being addressed by the Scottish Centre for Crime and Justice Research, which is being co-funded by the universities of Edinburgh, Glasgow and Stirling, and will ensure a more strategic approach to research across Scotland. The Scottish Higher Education Funding Council (SHEFC) and the Scottish Executive will be providing most of the money.

² Throughout we refer to 'departments', or Criminology as a 'discipline', for want of a better frame of reference. This does not reflect the particular presence of Criminology, embedded as it is in a variety of institutional locations, as an actively multi-disciplinary area of expertise.

One respondent in our survey believes that there should be closer links with the professional sector and a move towards more joint funding of research.

On the other hand, some respondents were concerned about the growth of Criminology as an academic subject. One person said that the *'preoccupation with crime now has replaced the former preoccupation with the welfare state'* suggesting a social scientific unease at following current political obsessions and concerns too closely. This also reflects an understandable nervousness that too much research is commissioned rather than funded.

A strong national professional association can provide a coherent identity and locus of intellectual collaboration. The British Society for Criminology is establishing itself in this role and has over eight hundred members, a number of active regional branches and specialist networks and organises an annual conference. They will shortly be launching their own academic journal – *Criminal Justice*, but are already associated with the British Journal of Criminology. But some see resisting a single disciplinary identity as healthy, and strive to maintain communication across a broad field of scholarship.

Criminology has emerged as a *'highly popular subject at undergraduate and postgraduate levels and as an area of research activity'* according to one respondent, but this creates its own pressures and problems: teaching demands cut into research time, and the rapid throughput of legislation requires that staff remain well-informed about changes in the criminal justice system. Its links to practice are not as clear as in some fields, and this leads to tensions within the discipline between 'pure' academic research income and the demands of government and agency commissioned work.

Many undergraduates see Criminology as a vocational subject, and a route into Home Office careers, the Probation Service, the Police and Prisons. No clear link between undergraduate numbers and future research capacity can be assumed, requiring sustained support for strong postgraduate training and postdoctoral research, and communication between those involved in both undergraduate and postgraduate teaching. This is an argument for a strong professional body.

Particular areas of emerging research interest included community justice, police studies, crime and governmentality. Others mentioned risk and security management; correction studies; ethnographic studies of criminal justice, regulatory institutions; forensic investigation; media; and anti-social behaviour. Criminology is well-placed to track and examine the significant volume of legislation being produced whilst crime remains at the top of the political agenda.

There was feedback that not enough scholarly, high quality research was being done, and that there was a lack of supervisory expertise at the top of the discipline. This would be addressed with a more coherent research agenda, and a clearer demarcation between Socio-legal Studies and Criminology than exists at present within the ESRC. While there are separate guidelines for the two, the ESRC Recognition Subject Area Panel comprises academics from both.

Summary

Criminology is a fast-growing area of study at undergraduate level. Its chief problem is one of visibility and coherence, given its location within a broad range of institutional sites, its diversity of research agendas and a relatively young professional association. Its multi-disciplinarity is both a strength and weakness, and there is disagreement within the field over whether it should even aspire to disciplinary status. But the community is clear that the strong multi-disciplinary nature of Criminology can be supported by funding postgraduate and post-doctoral work that straddles the disciplinary boundaries between Sociology, Social Policy, Psychology, Law and Social Work. Senior figures also propose the establishment of an ESRC-funded Research Centre or seminar series in which a clear research strategy and agenda can be cultivated.

Cultural, Communication and Media Studies

Cultural, Communication and Media Studies (CCM) is a dynamic and heterogeneous field that ranges across the humanities and social sciences, and often adopting an avowedly anti-disciplinary identity. Only part of it comes directly under the methodological umbrella of the social sciences, though its theoretical debates have significantly influenced a number of fields, within Sociology and Anthropology. Over the years it has adapted to new institutional settings and changes in research culture, developing links with Literature, Film and Television Studies, Politics and Sociology.

CCM is a medium sized field. It has a relatively balanced demographic profile, with a high proportion of permanent staff and UK nationals, and few fixed-term researchers. Half of the 12 responses to our survey came from post-92 institutions. Staff have a wide variety of backgrounds, and students who start in CCM can and do move into these other areas at PhD

level. There is a tendency for staff to work within groups which reflect their own research interests. Such groups do not necessarily identify themselves as being engaged in CCM research per se, but rather have more specific research identities – looking at the effects of digital communication for example – and might be located within another discipline or institute.

As with other practice-linked fields there is no seamless link between the expectations of undergraduate teaching, media practice and a research agenda, and it can be hard to find research active staff who are both theoretically 'up to date' and have relevant professional experience. Undergraduate courses tend to be marketed on the basis that the goal is a career in the industry rather than in academia. On the whole there is no explicit split in institutions between the academic and the vocational, although there is a tendency for research intensive units to be attached to more generic CCM departments. We were told that *'it is easy to recruit people from industry interested in coming back to pursue research'*. As a result many come into the field to do PhDs as mature students. There is a demand for trained graduates, but the research base is seen to be fragmented *'across a number of disciplinary areas'*, which hampers support and the *'ability to generate a critical mass of research students'*.

Relative to some subjects, Heads of Department in this field felt that both funding and recruitment was a problem. A high number of foreign students come to the UK for postgraduate training, especially from the far east, the US and new EU states, and there is active recruitment in India, for example, but few of these students stay. There is a problem recruiting home students into PhDs and Masters programmes, and most felt that it was important, or very important for the sustainability of the field to attract UK students and staff: *'UK social science cannot hope to have a flourishing future if it is increasingly reliant on migrant labour'* commented one. Another respondent elaborates on the issue, presenting the 'double-bind' that faced the subject: *'Key research areas are relatively new and this means that there are relatively few scholars in the EU/UK with the appropriate professorial profile while US scholars are expensive and often lack the international perspective required to work outside the US. Within the UK too few have the type of research skills necessary to compete with the best US and European scholars.'*

However, there are places that are developing multidisciplinary research niches, such as the Institute of Communications Studies at the University of Leeds, and networks are created internationally on specific areas of interest, such as the 'war and media network'. This is a positive aspect of internationalisation, co-existing with the view expressed by one that *'parochialism is a problem for the UK media sector'*.

Some respondents suggest that the field is struggling, a reflection of the view from some post-92 institutions. One bemoaned *'not having enough staff to develop programmes so that standards are maintained and intellectual stimulus is retained'*. Another added that *'I don't believe in closing departments and ending up with just a few centres of excellence. But I do think we need to revitalise and re-discover the inter/multi-disciplinary nature of our (broad) field and capitalise upon it more proactively. Culture, Communication and Media Studies has certainly become rather precious and stuck in its ways and we need to be more adventurous and innovative, as we used to be in the 1980s'*. An alternative view might be that whereas Sociology might be dealing with the big issues of globalisation and digitisation, CCM, with its links to the practice of the media in the social context, offers a research space to examine the specifics of practices and trends in the field. At the policy and strategic level, research agendas are set by Government commissioning bodies, and research tends to follow the industry rather than lead it.

Several expressed concern over uncompetitive academic salaries, mirroring the situation in other practice-linked fields. On the other hand, there was no mention of a dissonance between theory and practice, and *'Knowledge/Practice crossovers'* was mentioned as an area of emerging growth.

Summary

Innovative work is occurring in Media Studies, especially in places that build on networks of mutual interest and expertise in the field. There is some anxiety about the future of the field, and the importance of developing a strong UK-based research agenda. There are strong international research networks, and large numbers of foreign students, but there could also be more cross-fertilisation of expertise over undergraduate teaching and postgraduate training. These are issues that MeCCSA (Media, Communication and Cultural Studies Association), the field's professional association, is beginning to address.

Development studies

Introduction

We received survey responses from seven of the major departments – including Oxford, UEA, Birmingham, Manchester, Sussex and the OU – and supplemented this with phone interviews with key figures in the field. Each outlet had on average 140 taught postgraduates, revealing the field's reliance on Masters student funding. Only two of the seven departments had received a '5' in the 2001 RAE reflecting the field's origins as a practice-based profession, and its continuing involvement in short-term and policy research and consultancy work.

Development Studies shares a number of characteristics with other practice-based disciplines. Like Management and Business Studies, it has a high Masters student to staff ratio. Along with Social Policy, it has a high percentage of fixed term research and teaching staff, making up more than one third of all staff. Development Studies will have its own sub-panel for the first time in the 2008 RAE, a decision welcomed by the field. Despite lobbying, it has not been accorded subject status by the ESRC, a move that its community feel would promote the integrity of this inter-disciplinary field, and ensure that research applications are peer-reviewed by Development Studies academics.

Recruitment and retention concerns

Recruitment was cited as a concern by three of the seven respondents, though only two departments reported an unfilled post in the last year. Supply was felt to be restricted partly because potential recruits had to have a portfolio of skills. As one person put it, there is a *'limited pool of people in our specialised field who are able to combine professional experience with (an) academic research profile including publications'*. Others were less concerned, with one person noting approvingly that *'the people applying from the developing countries are in competition with British applicant'*.

Staff retention is also seen by some as a problem within Development Studies, especially within an institutional environment that prioritizes RAE-type research. As one person put it, *'The RAE is...in conflict with the policy-engagement priorities (and the associated short-term commissioned research contracts) of many staff working in the field of Development Studies. Difficulties of reconciling 'success' in the policy-advisory field with a lack of academic promotion is a major cause of staff turnover. Staff turnover is running at around 20% in 2004-5.'* Another consequence of the RAE is that unlike the first generation of Development Studies appointments, younger scholars have tended to be appointed with an eye to the RAE in their 'parent' disciplines. This may lead to a 'generation gap' of people without key multi-disciplinary skills.

Two other respondents mentioned turnover caused by their staff being offered employment within the UN and international agencies. As one put it, *'we do lose staff, primarily to other forms of development activity not based in academic institutions. That is in itself not a problem, but given our own financial uncertainties we do find it difficult to recruit'*.

One interviewee noted that when departments *'become dependent on working with big international agencies... people get sucked out of academia into these fields'*. He felt that both economists and those with *'soft skills – the ability to negotiate and operate in difficult circumstances'* – were attractive to commercial employers. Whilst he saw *'the move beyond academia and government'* as good, he also felt it wasn't a balanced process, and suggested ensuring that *'people have got the incentives to stay in the academic sector'*.

Sustainability, training and internationalisation

Six of our seven respondents felt that funding for students did not match recent growth areas in the field. Two respondents also suggested that there was a shortage of funding available for inter-disciplinary doctoral and postdoctoral work, especially work *'that interfaces between the natural and social sciences'*. They also felt that there were *'very few opportunities for funding for students outside Europe – more support for international studentships is very important'*.

The increasingly international composition of staff in Development Studies was welcomed by all respondents. One commented that *'recruitment of staff internationally would enhance the social sciences in the UK by bringing in new thinking and different perspectives'*. She went on however to point to a potential problem: *'there may be ethical issues in recruiting academics from countries where they are badly needed. It would thus be very interesting to have a support scheme for academic exchanges'*. As befits the field, another reiterated this internationalist perspective, commenting that *'the UK social sciences must be linked to international agendas for teaching, research and to inter-university collaboration'*. On the other hand, one interviewee felt that ESRC-sponsored academic exchanges were often limited by a lack of local matched funding (as would be the case with many African universities), and that this was something which the ESRC should address.

Two respondents commented on the issue of short-term contracts and the problems these posed for postdoctoral career trajectories, suggesting that *'transition mechanisms to help postdocs establish their careers would be very helpful'*. This links into concerns expressed within a number of other disciplines, and by several ESRC Research Centres.

Ring-fenced research funding was a concern for several respondents. As one person phrased it, *'Given the untying of UK research funds that form part of the international development budget, and the fact that applied, problem-solving, interdisciplinary research is perceived to be less attractive to the Research Councils, there is a strong need for a budget ring-fenced to UK-based development-oriented social science, whether this comes under the ESRC or some future "Development Sciences Board", and this budget should be managed so as to encourage practical and inter-disciplinary research'*.

Sub-disciplines and Emerging fields

Development Studies is characterised by its inter-disciplinarity and, as one person put it, *'a proliferation of sub-fields'*. Nonetheless, five out of the seven respondents mentioned the relationship between the environment and development as an emerging specialist field. One commented that the ESRC should direct more support for postdoctoral work and PhD studentships on the interface between the natural and social sciences (e.g. research on climate change within developing economies). Three mentioned governance, including *'global governance'* and the interfaces between *'management and development studies, and between public policy / governance and development studies'*.

One interviewee pointed to the problems faced by the institutional ecology in which many Development Studies units find themselves: *'Either people go into disciplinary departments, or are in bigger units. If they are in disciplinary departments, they are danger of being small and in (the) margins. If in bigger units, they're not all HEFCE funded, so depend on consultancy funding, and running short courses'*.

For most respondents, maintaining 'the energetic attempts' of the first generation of development studies scholars to be 'multi-disciplinary and inter-disciplinary' remains a priority, and that this inter-disciplinarity was exactly what appealed to many European scholars about Development Studies in the UK.

One person suggested that the lack of an RAE panel had led universities to appoint *'fewer true inter-disciplinarians'*, and was *'particularly concerned about the generational reproduction of the highest quality of inter-disciplinarity in studies of development'*. She felt that the ESRC could help this by giving active encouragement to inter-disciplinary research as well as to team work. Another commented that *'support for innovative subject areas and less conventional approaches to research would help promote creativity and new thinking'*.

For one of our sample, the field *'remains fundamentally inter-disciplinary – people may have a lead discipline, but their priority is dealing with the international development questions, and these need an inter-disciplinary approach'*.

One commentator was very concerned about what he called the *'academic integrity and quality'* of Development Studies. As we have already mentioned, Development Studies has grown up in close relationship with independently funded consultancy and policy research. As he put it, this *'has a down-side in terms of research direction, because Development Studies is more dependent on policy fashions'*. He went on to acknowledge that *'DFID (Department for International Development) has put money into large Research Centres – e.g. on chronic poverty – but this is always in close (and perhaps too close) relationship to the policy agenda'*. He suggested that a useful comparison was to Social Policy. Whilst this was *'strongly engaged with government, it deals with different government departments, and so can maintain more scholarly integrity. Development is just engaged with one government department. As a result, this means they have a great deal of influence'*. The problem of relying on 'outside' funding is that it makes the research and its presentation much more vulnerable to the agendas of funders.

Summary

The subject community expressed a clear view about the best way to protect the future of the subject. The first proposal was that the ESRC should reconsider awarding Development Studies subject status to promote the integrity of this inter-disciplinary field, and to ensure that research applications are peer-reviewed by Development Studies academics.

It would also seem important that the ESRC examine the best use of research funding to support research capacity building within Development Studies. This could be used to counteract the field's dependence on a single major funder, such as DFID. In this respect, the current ESRC/DFID joint research capacity-building exercise may be contradictory in its effects, as the field needs to develop its own autonomy.

Finally, the issues raised by respondents point to the importance of the ESRC targeting support for postdoctoral work and PhD studentships on the interface between the natural and social sciences.

Education

Introduction

Education is the second largest discipline under consideration in this review, and perhaps one of the most complex. Structural, historical and institutional factors affect all disciplines in different ways, but in Education their impact has been quite profound. There is excellent research being carried out, but there is also a relative dearth of young, skilled researchers of UK nationality. Despite its size, the field also tends to lack the research autonomy to enable it to engage in policy debates confidently and critically.

Many academic staff are 'second career' researchers, making the switch from the teaching profession mid-career. Whilst this inflow from practice into research can be seen as the field's unique strength, it highlights the challenges facing the development of Education's research capacity, and the need to promote dialogue and knowledge transfer between the various strands that make up the field. The prominence of education on the government's policy agenda, along with continuing concerns over research capacity, are the main challenges facing the discipline in the coming years.

Education, like Management and Business Studies, is somewhat anomalous in the social sciences. It has large numbers of staff, but two-thirds of these are not classified as research active in RAE terms. Two institutions, Cardiff and Bristol, were ranked 5* in the 2001 RAE and a further 12 were rated 5, out of a total of 83 submissions. Only 20 have ESRC Recognition.³

Education in the university sector comprises a number of quite different constituent parts. Initial Teacher Training (ITT) programmes are found in a wide range and large number of HEIs, many of which are post-1992 institutions. In a small number of prestigious institutions the focus is on building up a strong research community and programme, as well as offering ITT. A mid-range of institutions submitted to the RAE but were graded 4 or below in 2001. In these there are a substantial community of research active staff, but they find it virtually impossible to attract significant funding for research.

Looking to the future, university reorganisations are increasingly bringing schools of Education under the umbrella of broad social science 'colleges'. This is already having a positive impact on cultures of collaboration and the movement of staff, strengthening cross-disciplinary communication on every level. Psychologists or Sociologists of education are now more likely to be found in institutes of Education or graduate schools of Education.

Age, gender and nationality of staff

Just under 50% all academic staff in Education are in the 46-55 age range, and the field has the smallest proportion across the social sciences of staff under 34 (8%). More than 52% are aged 50 or over. The survey data shows that 56% of permanent appointments in the last year were female. Only 15% of studentship applicants were under 25 in 2003, compared to 60% of Economists.

Like Social Work, more than 90% of Education staff are UK nationals. In 2002, the ESRC Teaching and Learning Research Programme's (TLRP) Research Capacity Building Network carried out a comprehensive survey of over 500 individuals in the UK educational research community. It provides useful complementary demographic data. Less than a quarter began their research careers before they were 28, and just over a third began after they were 38. These figures indicate that many respondents enter educational research mid-career. The survey report observes that the curtailment of time spent in the discipline has 'an impact on the replication and development of educational research, perhaps limiting theoretical and methodological advances' (Taylor 2002:13).

Recruitment and retention concerns

Recruitment was not regarded as a major problem by respondents, and nor was staff turnover. However there is no financial incentive to move across from the profession into research, as academic salaries lag behind at every level. If these disparities widen, this could create further problems. Quality is also a key concern for some. It is difficult to attract 'candidates who have both the academic and the professional qualifications required.' 'Any suitably qualified person earns significantly more than an academic and they have no research track record'. Another commented that 'Although to date we have been able to recruit to every post advertised, the number of applicants for most posts is small and we have sometimes made appointments knowing that support will need to be provided'.

³ Refers to the outcomes of the 2001 Recognition Exercise and 2003 Interim Exercise.

The first and second quotes above highlight the importance of building trust between the profession and the research community. There is a continuing insistence that all staff involved in teacher training are practitioners. The body of senior research staff that predated the change in teacher training policy are shortly coming up for retirement. They have a significant body of knowledge and expertise, which cannot be passed on through the traditional apprenticeship model of academia because much current research in the field is piece-meal and practice-based. Paradoxically, this makes it difficult for educational research to inform policy and practice – *'there is a lack of evidence-informed policy making'*.

The RAE ratings do hide many pockets of expertise in institutions ranked below 4 and 5. This is not peculiar to Education, but unusual in a discipline of this size. One workable solution that has been suggested is to have 'networked PhDs' whereby a student is supervised jointly from a prestige institution and one that has the specific expertise.

Because of the salary disparities, the age profile of researchers, and the vocational emphasis of recent decades, there exists no clear academic career structure in Education. By contrast, career progression in the teaching profession is very transparent. One area of growth has been the popularity of Professional Doctorates. These are constructed more like Masters programmes, are chiefly taken up as a means of career advancement, and can be undertaken part-time with the practitioner still being school-based. Such people are rarely drawn wholesale into the research community. The one-year time scale of the PGCE conspires against students being able to reflect on theory, and much of the course is devoted to teaching practice. This, together with the decline of the Education bachelor degrees, means that the 'natural route' into research is severely curtailed (Furlong 2000).

Sustainability, training and internationalisation

Strong views were expressed about educational research. One commented that *'Educational research...has been criticised in some quarters for its lack of relevance to practice and policy-making...sustainability is increasingly identified with relevance – although relevant to whom might be an interesting question.'* Another added that *'there is a need to address the funding gap in Education departments and to recognise the need for some level of research/scholarship to be funded in 'learning led' HEIs''*. A third commented that: *'Given the quality of undergraduates in this university, the 'block' in the system is the acute shortage of funding for post graduate work...Current opportunities for 'cross over' from schools to Higher Education are almost non-existent in this country'.*

Furlong and Oancea (2005) offer a useful framework for assessing quality in applied and practice-based educational research. Their report points to both a continuing 'concern within the policy and practice communities about the apparent lack of accountability of researchers', and a wariness within the research community about the push to marketise the research process. They aim to reconcile these different demands by developing a more inclusive and multi-dimensional notion of research quality within applied research. However, the report did not explore the limited congruence between academic research and applied, policy-led research, or the effects of policy-led research on research autonomy and capacity. There is a shortage of methodological skills amongst practitioner researchers, and space for improving communication between practitioners and researchers.

There is much to be done to increase research capacity in such a large discipline, and no quick-fix solutions. Education, more so than all other disciplines, is vulnerable to changes in policy legislation, affecting schools and Higher Education alike. The variety of types and locations for educational research also make communication difficult, and work against the creation of a proactive research agenda that addresses both educational theory and practice.

Through our survey the community underlined the importance of translating the concept of 'life-long learning' into the research and teaching agenda, and taking a broader perspective on what education actually comprises. Communication routes between researchers in Higher Education teaching, practitioners in schools and universities and colleges, and researchers in Education need to be opened up and expanded. At the prestigious end of the research spectrum, Education is highly multi-disciplinary, a strength which should be supported. Academics segue from a variety of disciplines, through research topics with an educational focus, into more mainstream education research. Yet there are too few institutions, and too few mentors to create a confident, focussed community. A large proportion of those senior figures who remain will shortly be retiring.

Because of the unique nature of Education research that sees practitioners moving into academic posts mid-career, there is no clear point at which research methods are taught at present. We see this as a training issue for the ESRC to address. And for those moving in temporarily, the bulk of research continues to be qualitative, small-scale and of personal interest. In addition, practice-based research tends to 'disappear', rarely reaching peer-reviewed journals.

Emerging subfields

A large number of emerging sub-fields in Education were listed by respondents. These include: inclusion related issues, citizenship, outdoor education, early learning of professionals, learning and teaching in Higher Education/Further Education, widening participation, e-learning, cross-disciplinary working in the public sector with reference to early years education, ethnicities, ICT in learning and teaching and knowledge creation, social pedagogy, integrated service provision (education, health and social work), youth work studies, non-formal learning. Research into e-learning and Higher Education teaching seems to be happening primarily in older universities. It is clear that across the board innovative and wide-ranging practice-linked research is taking place, but there is scope for extending the creation of systematic linkages between theory and practice.

In recent years, the quality of teaching in HEIs has been addressed by the Quality Assurance Agency (QAA), and subsequent initiatives by the funding councils. Higher Education research has now become a sub-discipline in its own right and is potentially a model for the subject more broadly. It is a field where there is strong research activity and communication with Higher Education teaching staff, as well as a useful bridge between the research community and teaching academics.

Summary

Any simplistic distinction between educational research and practice is problematic, given the practitioner background of many educational researchers, and their involvement in teacher training. Programmes such as the ESRC Teaching and Learning Research Programme (TLRP) place a key priority on practitioner engagement. However many researchers emphasise the need to strengthen the theoretical base and research capacity of the discipline. Its vulnerability to political process, the low status of its undergraduate degree, and the demands of the teacher training conspire against a strong and autonomous research field. On the other hand, some practitioners become frustrated by the slow turnover of academic research, and are distrustful of teaching fads promoted by those who have never taught. The importance of promoting a dialogue is undoubted, but will require major changes both to the ways in which teachers are taught and the status of pedagogy within universities.

Management and Business Studies

Introduction

The size and complexity of Management and Business Studies (MBS) makes it both highly distinctive and of strategic significance to the ESRC. The research performance of MBS has a troubled history. Traditional performance indicators such as RAE grades, success in responsive mode research applications and numbers of ESRC studentships are unflattering. There are a number of explanations for this: there is little agreement on the methodological or theoretical frameworks within which to carry out research; a need to perform both for academic and corporate domains; very high student numbers, and high student-staff ratios; a relatively weak presence in the stronger research universities; under-investment in the research infrastructure; and the attractiveness of career options outside academia.

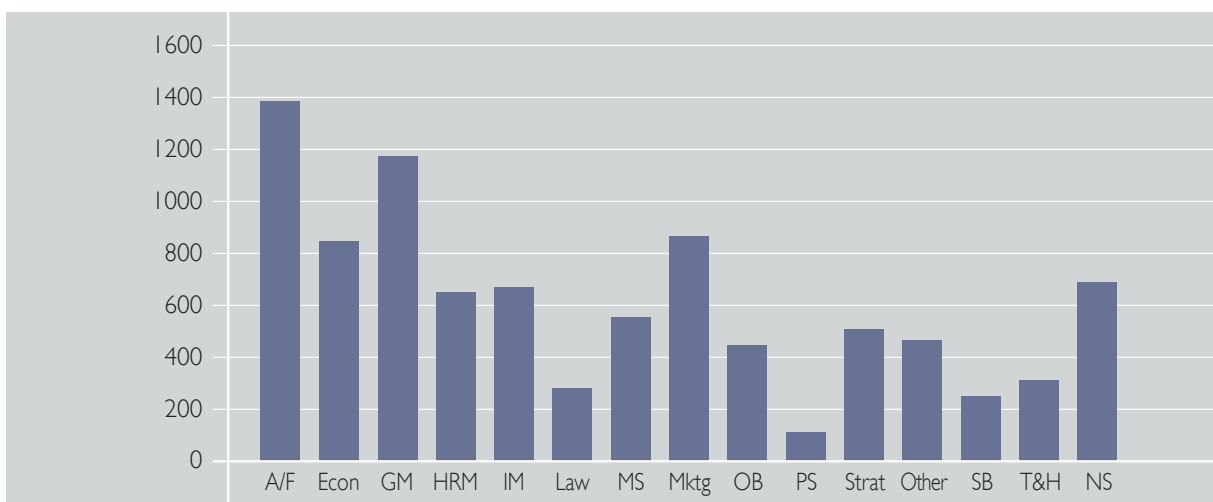
Much of this can be put down to the history of the field. As a result of the popularity of the MBA, and the associated resource it brought to business schools, the discipline grew very quickly, with little opportunity to establish a strong disciplinary identity. The multi-disciplinary background of academics working in business schools, and their ambivalence about applied research carried out by practitioners outside academia, add to the complexity.

Recently, these institutional and structural factors have begun to be recognised. Investments, such as the ESRC-funded AIM (Advanced Institute of Management Research) Initiative, are seeking to strengthen the quality of research in leading business schools. The British Academy of Management (BAM) has been increasingly active in promoting best practice and in encouraging both institutions and individuals to strengthen their research performance. In this case study we consider to what extent these current initiatives are succeeding. This case-study draws on national data sets and our survey of academic departments. In recognition of the size and complexity of the area we added a detailed web-based survey of staffing across all institutions in the sector.

The Structure of the Management and Business Discipline

MBS is currently the largest academic field in the UK, whether one uses the criteria of undergraduate students, Masters students or faculty numbers. In the 2001 RAE there were 97 RAE submissions which included 2526 active research staff. According to HESA figures there are a total of 6049 faculty in MBS, 23% of all social science staff, but this is an underestimate of actual staff numbers. Restructuring within universities has resulted in staff from the more traditional disciplines being relocated into business schools. According to our survey of websites, there are currently 815 economists, 280 lawyers, and 1380 from Accounting and Finance who are working in business schools (all of whom were enumerated separately in the 2001 RAE). According to HESA cost-centre data for 2003, more than 10,000 full-time and part-time academic staff work at the 119 business schools in UK HEIs. The full breakdown of academic staff in each subject is provided in Table 4.1:

Figure 4.1 MBS Staff by sub-discipline

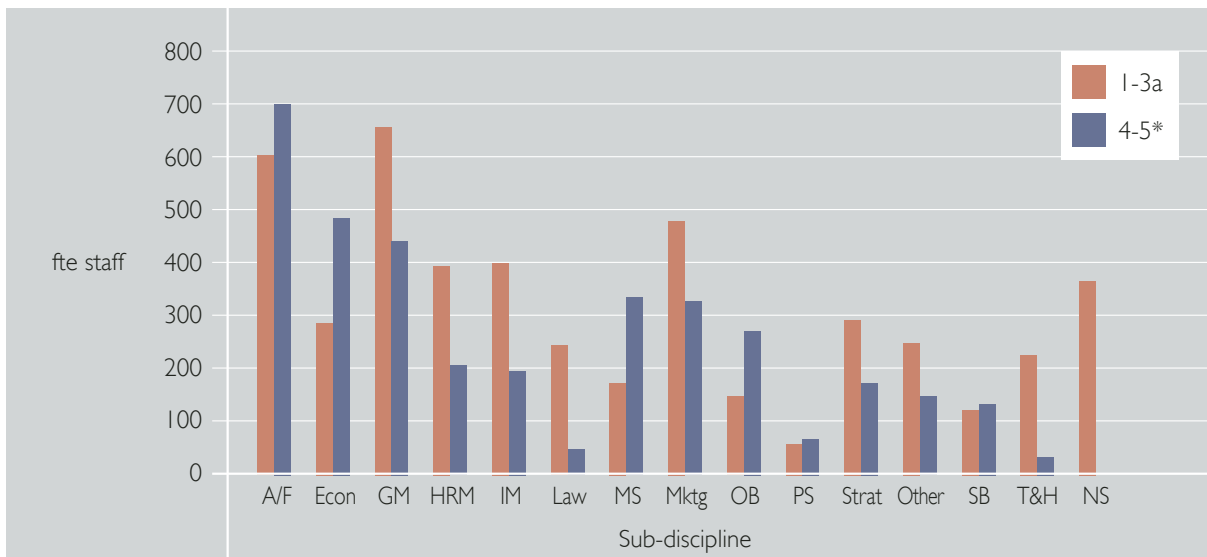


Key

A/F	Accounting & Finance	Law	Law	Strat	Strategy
Econ	Economics	MS	Management Science	Other	Other
GM	General Management	Mktg	Marketing	SB	Small Business
HRM	Human resource Management	OB	Organisational behaviour	T&H	Tourism & Hospitality
IM	Information Management	PS	Public sector	NS	Not specified

The approximately 2500 staff imported from Law, Economics, Accounting and Finance, are joined by a further 250 from each of Psychology and Sociology working within Organizational Behaviour and Human Resource Management. Several other smaller disciplines such as European Languages, Sports, Tourism & Hospitality have also been absorbed by business schools. This migration can lead to uncertainties in boundaries and identities. For example, many economists classify themselves as part of MBS for the RAE, and hence for HEFCE funding; but continue to define themselves as economists when approaching the Research Councils.

There are also significant differences within the sector, especially between the pre- and post-1992 universities. This can be illustrated most easily by a histogram which divides numbers according to RAE scores (the split here is on the 3a/4 line because this coincides quite closely with the pre/post-92 division). As can be seen in the histogram in Figure 4.2 there are significant differences in the location of disciplines between the two groups.

Figure 4.2 Location of Sub-Disciplines by Institution Type**Staffing by RAE scores**

The figure 4.2 shows that the more traditional disciplines (and subdisciplines) such as Accounting & Finance, Economics, Management Science, and Organizational Behaviour are concentrated in the business schools with the RAE scores of 4+. The newer and more applied disciplines, such as Human Resource Management (HRM), Information Management, Marketing, Law, Strategy and General Management (GM) tend to predominate in the schools with lower RAE scores. Law is an interesting anomaly because a number of law schools in new universities have moved wholesale into business schools whereas all the law schools and departments in older universities have, for the time being, resisted the temptation.

Our survey of Deans and Heads of Departments inquired into emerging specialities. There were no strong differences between schools with different RAE scores; some institutions seemed to be reinforcing their current patterns, others were remedying current areas of weaknesses. Subjects such as Design, Creativity, Travel & Tourism only featured in the lower-rated schools; those like Strategy and Economic Modelling only featured in the higher-rated schools. Overall, out of the 40 responses, the most frequently mentioned emerging specialities were: Entrepreneurship (9), International Business (7), and Leadership (6). The wide spread of emerging disciplines is perhaps the most interesting result from this question: a total of 44 distinct areas were mentioned. This implies increasing diversity in the evolution of the subject and the research base.

Recruitment and Retention

According to HEFCE 2005/23 a total of 400 new staff need to be recruited into the field each year, and this number will rise to 450 by 2010. Our survey suggests that around 500 appointments were actually made in the last year, demonstrating a healthy recruitment market. Since the sector is concerned to increase its research performance most institutions are looking for PhDs to fill these posts. As one respondent puts it *'Finding people with appropriate professional backgrounds who also have experience of or aspirations to undertake research (which, broadly speaking, is the ideal combination for lecturing in this field) can be difficult'*. In practice this suggests two main entry routes: either young PhDs who subsequently gain experience, or people with some experience (early to mid-30s) who subsequently register for part-time PhDs.

Each of these options has its problems. As one respondent noted, *'Although we have been able to recruit some staff at the lecturer level with some postdoctoral experience and a number of publications, sometimes we are taking recruits not long out of PhDs or even close to finishing PhDs. In part this is due to the restricted number of postdoctoral positions available from which postdocs can move into lectureships with a few publications and research experience under their belt'*. This leads to over-promotion and teachers with a lack of experience. It can also cause retention problems. Several echoed the view that in a competitive RAE-driven labour market: *'Early career recent recruits who are research active are more likely to leave'* for more prestigious institutions.

And what of those who already have management experience? One respondent commented that such *'new entrants will want to shortcut into "proper" posts (i.e. lectureships) partly because they have greater need for a half decent salary and job security and partly because they are used to being treated as respected fully fledged colleagues in previous jobs'*. He went on

to note that ESRC studentships are *'simply not viable for them'* and that the *'emphasis ought to be on developing sensible (i.e. higher level) funding for research training for mature people entering the profession'*.

85% of the institutions surveyed identified specific problems of faculty recruitment, equally distributed across the most research intensive and least research-focused institutions. The most frequently mentioned recruitment problems were found in Accounting, Finance, and Marketing, whilst a significant proportion of un-filled posts were in Strategy.

In contrast, staff turnover is less of a problem. Only 35% of institutions reported problems. This was more marked in the less research-focused institutions, although some of those with RAE 4 and 5 grades identified *'RAE poaching'* as a problem. Several of the less research-focused schools commented that their turnover was *'too low'*, and that they were waiting for a larger numbers of retirements to come through so that they could begin to revitalise their faculty.

Sustainability, Training and Internationalisation

When considering the longer term sustainability of the discipline, the most common issue was salaries/incentives, raised by a third of all respondents. Academic pay was seen to be inadequate to attract the best talent either from undergraduate/Masters courses, or from industry. The next most salient issue, raised by 25% of respondents, and particularly the research-focused schools, was the perceived lack of funding from research councils, including research grants, PhD awards, and postdoctoral fellowships. Two of the less research-focused schools also argued for less concentration, and greater spread, in research funding, and the need for a separate *'Management Research Council'*. In 2004 the ESRC was funding a total of 2291 postgraduate awards, of which 147 (7.7%) were in MBS – even though the sector contains more than 25% of social science staff.

It could be argued that the low level of support at the doctoral level is related to poor performance in subsequent competitions: postdoctoral fellowships awarded to MBS currently constitute 12% of the total. In the three years from 2001 to 2003 there were a total of 23 responsive research grant awards made to business management, representing an average success rate of 16%, the lowest in the social sciences. One comment sums up the views of others about investment at doctoral and postdoctoral level: *'Students emerging from under-graduate and Masters courses with large debts simply cannot afford to take on doctoral work in the social sciences that will be followed by a relatively poorly paid job afterwards and several house moves all over the country before attaining a permanent position. Doctoral and postdoctoral work needs to be seen to be more attractive, with a clear, solid and stable career structure afterwards. Investment at this level will create stiffer competition for lecturing jobs too.'*

Respondents in MBS saw the trend towards international recruitment as potentially problematic (77% saw it as important, or very important to recruit UK-domiciled staff). Those with strong views saw it as a problem: *'It is essential that institutions replicate themselves, consequently UK-domiciled staff are essential for this sustainability'* and *'It is vital really, otherwise we're just training people to take their skills overseas. It also becomes a vicious circle in (that) the students see less and less UK lecturers and so do not see it as a good career'*. However, many of the respondents also recognised that they were operating in a global market, and that internationalisation was potentially a good thing: *'It is important. However, it is equally important for us to attract world-class staff from elsewhere particularly those trained in North America'*.

AIM (Advanced Institute of Management Research) – Capacity building in Business and Management

The ESRC is already targeting significant funds at the MBS area through the AIM initiative. This is intended to build capacity and capability through developing a strong research culture, and the initiative has been attracting good quality researchers in business schools across the country. It has also facilitated the resurgence of existing institutional structures within the field, working to disseminate best practice right across the sector. The Director of AIM, Professor Robin Wensley, recognises that the overall situation is complex: *'there is a shortage of excellent candidates for senior posts, and a lack of a younger academics coming forward with good research proposals... AIM can only address such matters obliquely, and the results of the work that is ongoing can only be guessed at'*. The work of AIM has yet to be evaluated.

Summary

A shortage of research funding opportunities, as well as of qualified and high-quality staff, continues to affect the quality of research carried out within the MBS community. In allocating funding for training and research, the ESRC needs to balance strategies for building research capacity with those that prioritise the quality of research funding and studentship applications. This trade-off between quality and strategy is difficult, especially in a field as large as MBS. If MBS fields and sub-fields are a high priority within the ESRC's strategic aim of building research capacity, targeted extra resource may be

desirable. And it may be appropriate that the MBS studentship allocation takes account of population size as well as research-quality indicators. It may also be appropriate to extend the AIM model of ring-fenced research funding for the field until it is more able to compete for research funding on equal terms

A number of other recommendations have been put forward. Some in the MBS community argue that the ESRC could explore the possibility of jointly funding training with business schools, especially in situations where it will also have direct impact on the quality of training. This is a model that is beginning to be adopted in fields such as Law, where a salaried component of a PhD stipend is offered in return for teaching duties. Others urged a pro-active campaign to encourage the most able candidates to consider academic careers, whether they are postgraduates or already working in industry. Finally, as a subject field, MBS needs to work hard to create a more productive and engaged dialogue between university academics and those doing practice-based research.

Social Work and Social Policy

Introduction

The two fields of Social Policy and Social Work are undergoing a number of changes. Within Social Work, the government has introduced bursaries for undergraduate students studying accredited degrees in Social Work (which since 2003 have replaced the separate DipSW, Social Work Diploma), and these are now available to students of all ages. The new degree, and the launch of new Masters courses, has led to a growth in student numbers and lectureship appointments. Precise national figures for students on professionally accredited Social Work degrees are difficult to come by, partly because the categorisations used by HESA are '*notoriously unreliable*', according to one source, including all degree courses with elements of social care. However, according to the General Social Care Council (GSSC), around 5000 students were accepted onto accredited undergraduate degree courses in England in 2005, up 200 from 2004.

On the other hand, Social Policy has suffered in recent years from a steady decline in undergraduate numbers, down from a high in 1996/97. The field has also been changing as more policy-related research is carried out under its heading. Acceptances to Social Policy single honours degree courses in 2005 were 921, an increase of 8.9% on 2004, slightly higher than the sectoral average (UCAS). Its postgraduate numbers have been less affected.

Demographics – Age, Gender and Nationality

Social Work is one of the smaller social sciences according to HESA data (2003/4), with fewer than 600 permanent staff. It is the field with one of the largest percentages of staff between 50 and 55, with 47% of its staff aged 50 or over. These figures reflect a career profile where, as one interviewee put it, '*by the time they've done a social work qualification (in their late 20s), and done some practice, and developed a research specialism, it is difficult to find people under 40 to appoint*'. As another commented, '*there is a real issue around a generation gap*'. One person suggested that you can '*buck the trend*' by supporting and developing more postdoctoral staff. The field also has the highest proportion (60%) of female staff. As befits a field undergoing renewal, our own survey revealed high retirement and appointment rates as departments recruited replacement staff. The student-staff ratio is high, mitigated slightly by the way that much of the Social Work course is spent on placements.

Because the growth in student numbers (and the increasing focus on practice-based learning) has not always been met with an expansion in permanent posts, institutions have become more reliant on fixed-term teachers, leading to increasing pressure on existing staff. As one respondent noted, '*Social Work has always had a certain amount of buying in staff for areas of professional practice – e.g. children, mental health (hugely difficult to cover), covering the areas of need demanded by the curriculum*'. However he went on to comment that as institutions developed research and policy specialisms, the broader professional support they can offer '*becomes lop-sided...I'm sure institutions are struggling*'.

Social Policy has a rather different profile. According to HESA data (HESA UoA 2003/4) there are just over 1100 permanent staff employed in Social Policy units, with another 700 on temporary contracts. Many of the latter are research staff, for within the social sciences, Social Policy has the third highest percentage of staff employed as fixed-term researchers, indicative of its research focus and capacity.

Social Policy has a slightly older age profile than the average for the social sciences, with 42% of staff aged 50 or over, and 20% of staff aged 56 or over (HESA 2003/4). This is a reflection of career profiles within this field, with people coming into the discipline after gaining professional experience outside academia. It may also reflect a drop in staff recruitment as

undergraduate numbers fall. The discipline has a comparatively high proportion (50%) of female staff, though women tend to be over-represented amongst those holding temporary posts. After Social Work, the subject has the lowest proportions of non-UK nationals (11% of all staff), partly because of the need for staff with experience and understanding of a domestic policy context. Several of the respondent departments had large numbers of fixed-term research staff, testimony to their success at carrying out applied social research.

Recruitment and retention concerns

Information about the survey was circulated via the Social Policy Association (SPA), and SWAP – the Higher Education Academy Centre for Social Work and Social Policy. Ten responses were received, and in several cases, the boundary between the two disciplines seemed particularly porous. The definition of Social Policy itself is also changing. The term is particularly used in post-92 institutions to describe mixed social science faculties.

As in Education and the other professional disciplines, our respondents in both disciplines noted the difficulty of appointing people who are both practitioners and have a research track record. One noted that more than 90% of appointees had social work qualifications, a pre-requisite for teaching undergraduates in some institutions. Several reported difficulties appointing professorial staff, especially those with appropriate professional experience in the fields of social work and family therapy.

One interviewee noted that with the new social work degree, *'application rates are going up enormously, and student numbers are increasing'*, leading to a *'boom in academic appointments in social work'* and a lot of competition between departments for a *'pool of applicants that is very small'*. Our survey data showed social work to have relatively high appointment rates. One way in which departments are dealing with this competition was to appoint people further up the lecturer scale, but as one person noted, *'the difficulty in practice is that people who apply are not ones who you would want to appoint at the top of the scale'*.

Inevitably, some respondents commented that recruitment was affected by academic salaries comparing unfavourably with those available in professional fields outside academia, such as in social work and family therapy. As one person noted, *'we require professional practice experience as well as academic credentials but only offer relatively poor salaries. Similar problems occur at the boundary with some clinical grades e.g. family therapy'*. Another, exaggerating somewhat, suggested that *'anyone who has hung around and worked in Social Work will be on 50k by their late 30s'*. Others felt that this differential was not the key issue, pointing to the very different working conditions in the two sectors. One felt that the shortage of qualified applicants, *'especially at the senior level'* was simply the result of institutions increasingly requiring both *'high professional skills and research skills'*.

Several people explicitly pointed to a shortage of social policy researchers with quantitative skills, stating that they had to recruit from other disciplines. An Institute of Health Research reported that they had *'a lot of recruitment problems at senior researcher level and at all levels in health economics and health services research with social science skills'*.

Turnover of permanent staff was not seen as an issue in the two fields. However, two people pointed to the way that within Social Policy short-term research contracts *'hinder continuity and research capacity development'*. Another noted that *'in areas where we have been able to give stronger, active support for inter-disciplinary researchers there has been considerable payoff in terms of intellectual vigour, disciplinary growth and conceptual productivity'*.

Views on sustainability, training and internationalisation

In 2004, the Social Care Institute for Excellence (SCIE) funded an evaluation of the nature and extent of Social Work's involvement in ESRC funded research. It encountered a wide-spread perception amongst social work staff, as with staff in other applied and practice-based fields, that their applications were not viewed favourably and so were reluctant to apply for funding from the Council. As a result of these concerns, the ESRC is currently jointly funding with SCIE, SIESWE (Scottish Institute for Excellence in Social Work Education) and JUC/SWEC (Joint University Council Social Work Education Committee) a separate audit of social work research and its character, its strengths and its weaknesses. This review will inform its work.

One interviewee commented that *'Social Work doesn't have a clear policy on training the next generation of staff, and looking out for academically bright, younger social workers who could be supported through a programme – a ladder of progression'*, and that it was the *'job of both the ESRC and universities to think of creative solutions... nudging them to make these changes'*. As a result, he felt that there was a *'dearth of people coming through in the late 30s/40s who meet the criteria for research-*

intensive institutions’. Part of the solution, he felt, was to strengthen the field’s research base by encouraging institutions to develop particular areas of research expertise (e.g. work with children), but he also felt it was important to *‘fast-track people with professional qualifications who are interested in doing research – it may be that we have to support them gaining professional experience whilst employed by their university’*.

Not having had subject recognition by the ESRC, Social Work respondents acknowledged that there had been very few applications for doctoral studentships. As one person put it, some had solved this by applying for ESRC studentships *‘under a flag of convenience – I have no problem in sending it off to ESRC and calling it Sociology, but some of my colleagues wouldn’t agree’*. Recognition by the ESRC will give the field a more distinct identity. Another commented that more effort could be made by departments to apply for CASE Recognition, but that it remained hard to find qualified applicants to fill such posts. In 2003 only a handful of institutions were ‘recognised’ by the ESRC as outlets for research training in Social Work. One respondent noted that with the increased expectation by universities that staff will hold (or acquire) PhDs, *‘there is a gendered split because of the difficulty of supporting a family whilst doing a PhD’*.

Two of our respondents commented about what one called *‘the continuing ambiguity about Social Work’s natural allies within Higher Education’*. One commented that *‘on the whole Social Work is associated with traditional disciplines in the old universities, but in the post-92 universities, its association with professional schools, normally health, will continue to be marked’*. A respondent from a new university added that his institution’s focus on more *‘applied and policy-driven research’* was *‘less favoured in esteem and funding’*. Another commented that the growth fields in the discipline were *‘inter-disciplinary and inter-professional research across Social Work, Education, Law, Health and Medicine’*, such as child and family issues, and the care of older people.

The ESRC’s recognition of Social Work as a subject discipline was mentioned as a significant step forward. As one interviewee put it *‘this means that the ball is in our court to push in research bids....we need to be developing mechanisms for developing research capacity’*. Yet he also felt that *‘the discipline will be pulled two ways’*, between Social Work *‘becoming part of the social sciences’* in an RAE-led environment, and the *‘other broad agenda that Social Work programmes should involve carers and service users within everything’*.

Similar concerns over funding opportunities for PhDs were voiced by Social Policy respondents, and several also mentioned a shortage of postdoctoral funding opportunities. One person suggested that more opportunities be given *‘for acquiring specialist skills through collaborative workshops e.g. analysis of large-scale datasets’*. Social Policy respondents had thoughtful ideas for challenging the research ‘concentration’ model encouraged by what one called a ‘science model’ RAE. One proposed *‘increasing emphasis on facilitation’* rather than concentration, and had a stream of ideas for this, including *‘funding with a focus on the development of researchers’ careers; more joint initiatives between the ESRC and government departments to try to embed a slightly less managerialist and instrumental approach to research; more initiatives bringing together researchers and research users in national and local government’*.

Such comments mirror the frustrations expressed by many practitioners working within local government about the irrelevance of academic social science to their work (Commission on the Social Sciences, 2003).

Summary

As in Education, the tension between responding to policy-driven research agendas and building autonomous capacity and research specialisms is particularly acute in these fields, (see Furlong and Oancea 2005). Where might the solutions lie? Two respondents urged a move beyond disciplinary boundaries, pointing to the way their inter-disciplinary schools had supported research careers in this field, whilst another suggested recruiting *‘practitioners and applied researchers’* at an appropriate grade. One respondent called for a meeting to address ways of bringing social work researchers and research users together. He mentioned *‘Making Research Count’* – a forum for academic research in social work and local government – as a good example of the interactions that need to develop.

Socio-legal Studies

Introduction

Socio-legal Studies staff and socio-legal research are predominantly found in Law schools. This matters, as the institutional culture of Law schools shapes the very nature of Socio-legal Studies, and the work of those faculty members engaged in the field. Whilst there is the pressure and drive from the profession of Law that demands an overarching vocational

impetus to the university curriculum, there is also an expectation that graduates are made very conscious of 'the social, political, economic and other contexts in which the law operates' (Fox and Bell 1999:1). This opens up the field for empirical socio-legal research. However the work that is commissioned is often heavily geared to the needs of policy makers, meaning that the academic community is discouraged from generating their own research on how the law and legal institutions operate. Perhaps because of the heavily vocational emphasis of Law courses, there is a small pool of young law graduates happy to risk the uncertain future that a PhD in Socio-legal Studies entails. Economically, there are heavy financial costs and risks in undertaking postgraduate studies and seeking postdoctoral funding, set against the financial rewards of a professional career in law.

The Nuffield Inquiry into Socio-legal Studies received most returns from socio-legal academics in the 50-59 age bracket. This does not necessarily reflect the true demographics of those engaged in socio-legal work, as those under 30 are very hard to 'capture' in such a survey. Our survey results showed that most (40%) permanent appointments over the last year in Socio-legal Studies were in the under-35 age category. Other data from the Inquiry shows that there is a high migration into Law schools from other disciplines, especially Sociology. This suggests that, historically, Socio-legal Studies is an importer discipline, with a relatively older age profile.

Issues facing socio-legal academics include heavy teaching loads necessitated by the demands of the profession, the lack of status of Socio-legal Studies within Law schools, and the vocational nature of law. Together, this means that few of the best graduates considering an academic career which involves empirical research. The lack of legal knowledge inhibits entrants to Socio-legal Studies from other areas of social sciences. Funding from undergraduate numbers is healthy within Law schools, and this has to be set against the resources that would be/are required to sustain ESRC Recognition status.

Age, gender and nationality of staff

19 returns were received from Socio-legal Studies, 14 of which were from Law schools rated 5 or above in the RAE. Despite anecdotal evidence that the field is a 'soft' area of law, dominated by women, our survey results shows that 55% of permanent appointments made last year were male. Just over 60% of permanent appointments in the last year were UK nationals, around 35% from the EU and 5% from North America and Canada. Accordingly, only a minority of respondents cited recruitment of UK domiciled staff as important or very important. Relatively speaking, a high proportion of faculty are from the EU.

A number of respondents – five out of 19 – pointed to staff turnover as a problem, and that there was a lack of incentives to stay in the field. Repeatedly respondents said that little empirical work was being carried out. A number of factors were cited as affecting the quality of empirical research. One commented that *'the PhD is not as valued in Law as in other disciplines'*. This is supported by findings in the Nuffield Inquiry which showed that 30% of ELS (Empirical Legal Studies) supervisors did not themselves possess a PhD. *'A PhD was not considered a central part of the pathway to a successful career in a law school'* (Nuffield Inquiry – Preliminary Results). As mentioned before, the vocational nature of law draws off most graduates. A final problem is that permanent posts within law schools are more attractive than post-doctoral funding opportunities – leading to a lack of a culture of empirical research in Law schools.

Summary

Socio-legal Studies lends itself to interdisciplinary work, and there is clear awareness that there is a significant potential for quality empirical work to be done across disciplinary boundaries. The Nuffield Inquiry consultation document has stimulated a discussion within socio-legal studies, which will lead to a set of recommendations for the future. However, some clear ideas emerged from our own work on the sustainability and development of research capacity in the field, which may reflect the findings of the Inquiry.

As with other practice-linked fields, socio-legal work is often hidden, taking place in unexpected institutional niches such as business schools. The value of socio-legal work needs to be promoted, and its relevance to all areas of life highlighted. Part of this is an internal issue within law schools, and part is about wider public perception. The situation is not helped by its invisibility at undergraduate level. There are significant structural differences between law and social science teaching, leading to skills and knowledge gaps for both legal scholars and social scientists. Legal scholars need training in empirical research methods and social scientists require legal training. These shortcomings could well be addressed at the undergraduate, postgraduate, and/or the postdoctoral level.

Town and Country Planning

Town and Country Planning is a relatively small discipline, and is vocationally oriented at undergraduate and postgraduate levels. We received six responses from the 28 departments that submitted to the 2001 RAE. These ranged across the spectrum of research activity, three each from pre and post '92 universities. The RAE panel covers a number of areas, including transport, housing, environmental studies and landscape architecture, and some were concerned about the dilution of a focus on planning as a result.

One interviewee felt that there was a degree of insecurity in the field because it is not a discipline in the classic sense, and understandings of what constitutes Planning vary across national boundaries. On the other hand, its inter-disciplinarity is also seen as strength. Most research active staff are trained in disciplines as diverse as English Literature, Social Anthropology, History and Geography. In larger departments, where institutional investment has been significant, confident research groupings emerge. These attract good staff and students, as well as substantial funding for projects that engage both theoretical issues and policy-related work. Where institutional commitment is not so strong, expertise can be lost. One example given was of a leading academic struggling with no support for ten years who finally moved to a European university.

Recruitment and retention concerns

Town and Country Planning is a predominantly male field. 89% of staff are UK nationals, and there is little evidence that this is changing. In our survey, all but two of the 16 staff appointments made in the past year in Town and Country Planning were UK nationals, and most were aged under 45. One person justified this: *'Town Planning as a discipline is largely culturally dependant; it is important that most of the staff teaching the subject understand the context within which planning takes place.'*

As with other practice-linked fields, respondents cite the difference between professional and academic salaries as the issue driving recruitment problems. Several departments had been unable to fill senior posts, others were worried about the quality of applicants because *'competition between recruiting departments is strong and there tends to be a number of departments recruiting to similar posts at any given time'*. This respondent added that *'the last time the Department appointed an external candidate to a Chair was in 1979'*. Post 92 universities have difficulty retaining good staff, losing them to higher prestige institutions. The other common, practice-linked issue is the particular relationship between academia and the profession and the place of research within the scope of both. As one person put it, *'the nature of Town Planning as a discipline requires a balance of teaching and research between applied policy relevant and vocationally oriented work and purer academic research. At the upper end of the spectrum, with a relatively small discipline, there are only a handful of individuals who can move between institutions. At the lower end, the wider job market combined with general perceptions of Higher Education means that academic careers are not high priorities for many.'*

Sustainability, training and internationalisation

Because of its small size, Planning respondents perceive problems in sustaining it as a strong research field. Encouraging good students into a research active career via the conventional 1+3 route is therefore difficult. One person commented that: *'Many students who embark on either undergraduate or postgraduate planning programmes have a strong vocational aspiration, and a further four years of study (1+3) discourages all but the most keen. We have been able to attract good candidates to our two quota studentships, and have been reasonably successful with our applications for CASE studentships'*. Others commented that *'the new 1+3 model is great for training but attractive to fewer students'* and *'Finding good doctoral students is perversely even harder than securing funding'*. It was felt that those who were just starting their career needed supporting, and that the career opportunities should be improved. Another respondent (in a post 92 institution) stated that *'virtually all our research students are from overseas, funded from local sources'*.

The planning 'culture change agenda' has led to innovations in degree structures, bursaries, and increased government funding *'all of which in combination can contribute to making a research/academic career more attractive'*. The ODPM (Office of the Deputy Prime Minister) bursaries, administered by the ESRC, were highlighted as being *'very useful in funding taught Masters'*, but that these mainly address the acute shortage of professional planners.

According to some, the numbers of postgraduates vary hugely from year to year, depending on available funding, and the type of work being carried out. Vocational Masters courses are very popular with home students, whereas most PhDs are being done by foreign students from across the world. Malaysia, for example, sends a number of students each year

because of historical links in planning practices. These students are usually on three year scholarships and return home on completion. Other foreign students cannot be categorised so easily and there is little tracking of postdoctoral career paths.

International academic collaboration and communication is limited by the national specificities of planning rules and practices, although research at the European level and in overseas planning development issues is going on, especially in the more research-intensive departments.

Two respondents remarked that *'we do not have enough quantitative and GIS people entering the discipline yet'* and another that *'there is an issue associated with quantitative analytical skills, as monitoring and evaluation become more important elements of decision making, albeit linked to community needs and aspirations. These hard technical skills are becoming more relevant but scarcer.'* Other emerging sub-fields cited included planning in developing countries, links between theory and practice, particularly around concepts of spatial justice, and the interface of economics and planning practice.

Summary

As with the other practice-linked fields, Town and Country Planning's dual identity as a field of both academic work and professional practice can cause problems. Communication between the profession and academia was not raised as an issue. Respondent's biggest concern was the ability to retain the strongest candidates as academics, and there was an appeal for a less rigid training and funding structure than the 1+3 studentship model.

With no dominant theoretical canon, and an interdisciplinary character, there is much space for innovative work. Some departments regard their major role, from undergraduate level upwards, as promoting and teaching planning as a critical social science rather than as a vocation. The undergraduate degree and taught Masters courses remain primarily vocational, but research graduates are encouraged to approach the subject holistically and critically. One respondent felt that only this approach could ensure the vibrancy of research within the field. He called for more recognition by government of the existing and potential role of planning in society, as well as for the professional/ vocational associations to promote that scope.

Case studies of the 'research-focused' disciplines

Anthropology

Anthropology is one of the smallest and most research-intensive of the social sciences, with around 300 research active staff in just over 20 departments. The majority of staff are trained in Social Anthropology, but several departments (Durham, Oxford Brookes and UCL) maintain strong research specialisms in Biological Anthropology. Others support significant programmes in material culture studies. In a field with *'diverse theoretical perspectives'*, one respondent suggested that the growth areas would *'vary according to which staff member one asks'*. A great number of sub-disciplinary growth areas were cited by the 14 departments that responded, with medical anthropology (6 citations) mentioned most often, followed by visual anthropology (3) and the anthropology of human rights (3).

Along with Sociology and Economics, Anthropology is one of the largest 'exporter' disciplines in percentage terms. From research into Anthropology career paths (Spencer; Mills and Jepson 2005) we have statistical evidence to support this finding. Of the 230 anthropologists trained in the last ten years and employed in UK universities in 2004, 46% were now employed outside Anthropology departments, both in permanent and temporary positions. This proportion is echoed by a comparison of HESA JACS and UoA data (Table 3.2), showing that only 50% of those UK-employed academics with Anthropology degrees are working within Anthropology departments. This export occurs both because of the small number of permanent posts available within Anthropology, and because it provides students with a set of valuable research skills that are easily transferable and put to use in creative ways.

As one might predict, respondents report very high numbers of applicants for junior lectureship posts – *'70-130'* for one post and *'58'* in another. No other discipline quoted specific numbers of applicants for posts. People pointed to more difficulty in recruiting to more senior posts, especially *'senior staff of world-class rank'* and *'star candidates from the US'*. Two said that in future they would just advertise for junior staff and then promote internally. Several raised concerns about London housing costs, with one respondent noting that as a result they had lost young members of staff. Others also acknowledged a turnover of staff, but one commented that this was *'to be expected and can indicate a healthy and dynamic discipline'*.

The numbers of applicants for junior posts is testimony to the high level of PhD production. It also suggests that PhDs in this field prioritise an academic career as an anthropologist over other career options. As with other fields, there is a call for more funding for postgraduates and postdoctoral researchers, but also more funding for inter-disciplinary work with arts and humanities and the natural sciences; simpler application procedures for funding; and more opportunities for staff in post to carry out research.

Suggestions for sustainability and capacity building included; *'lowering the age profile of researchers by making research and university careers a more manageable and attractive option, and some provision for rebuilding research capabilities and networks with overseas research institutions on a long term basis (rather than the short term collaborations over specific projects).'* Another commented that *'we need more funding for projects which can incorporate PhD studentships, and also for postdoctoral fellowships (to bridge the gap between PhD and academic employment).'* A third suggested funding both *'pure and applied research so as to demonstrate that the social sciences address stimulating intellectual issues but also provide students with qualifications for professional careers'*.

The majority of Anthropology research students are not UK nationals. 17% are from Europe, 11 % from North America, 11% from Asia and 12% hold joint nationality. Their movements on completing their degree also differ. For some, especially from the EU, a Social Anthropology PhD in Britain is a step towards longer term employment in the UK. For most East Asian students, the PhD is used as a platform for a successful academic career in their home region. A relatively small number work in North America, and most of those are US or Canadian nationals returning home after their PhD.

HESA data on Anthropology's increasingly international employment profile is echoed by one response that welcomed this trend: *'in our subject scholars tend to be very mobile and willing to take up positions anywhere in the world. International fluidity in the academic job market is more important than home recruitment'*. However, mobility is not always two-way. Despite the close intellectual links between the US and UK disciplines, few British nationals take up academic posts in North America. Again, views on this topic were divergent, One felt that *'overseas students coming to the UK (and thereby supporting the continued existence of many social science departments) will probably want to be taught by at least some UK staff'*. Another respondent pointed to possible future problems given the evidence that *'China is designing academic packages to attract overseas Chinese to return. This offer may become more common as relative living standards change in a number of countries'*.

A rather different perspective on internationalisation was offered by one respondent who called for funding for *'exchanges of young postgraduates and postdoctoral researchers'*, as a way both to take PhD students from sub-Saharan Africa and to expose our students to *'the objective conditions for research and the rather more pragmatic research concerns, of colleagues in (for example) these African universities'*. She felt that this would *'significantly advance truly collaborative international research'*.

When responses from Anthropology are compared with those from Sociology an interesting difference emerges. Anthropologists' call for support for younger researchers contains the implicit assumption that they will want to remain in academic Anthropology. But the discipline supports relatively few permanent posts, so many leave to take up posts in other fields. By contrast, the movement from Sociology to other fields appears to be much better known, and the practice-linked disciplines all cite Sociology as a feeder subject. Anthropology could do more to encourage and highlight the contributions its researchers and its methods make to other disciplines.

Area Studies

Area Studies is an inter-disciplinary field bringing together scholars from a number of disciplines. It is one of the smallest subject areas with a social science component, and the total staff numbers in the three Area Studies disciplines make up less than 2% of all the social sciences. If one excludes European Studies, which is dominated by languages and humanities, 370 staff in 36 departments were returned to Area Studies in the 2001 RAE, spread fairly evenly across the three fields of Middle East and African Studies, Asian Studies, and American Studies (HESA 2003/4). The great majority of submissions were by Russell Group or '1994' group universities, and 75% of departments were awarded '4' or greater, though there were only six 5* submissions. More than 80% of all staff were recorded as research active in the 2001 RAE.

None of these figures can be used to delineate specifically social science activity within Area Studies, because they also include historians and humanities scholars. On the other hand, because there are relatively few Area Studies departments and submissions, many social scientists with Area Studies interests were returned in the 2001 RAE to disciplinary panels.

Demographics: Age, Gender and nationality

Within the research-focused disciplines, Area Studies has the highest percentage of older staff, with 43% of staff aged 50 or over (slightly higher than Sociology). If one compares the different subjects, Middle East and African Studies has the oldest age profile, with almost 30% of its staff aged 56+, and fewer than 20 staff under 35. This is likely to reflect the major growth and recruitment of this field in the 1960s, and a relatively small research staff population. In our survey of 250 staff in Area Studies, only five held fixed-term research contracts. This age profile points to a major turnover in staff in the coming years. More than 25% of staff in Middle East and African Studies are Professors, and more than 60% are men.

The Area Studies disciplines (not including American Studies) have much higher percentages of non-UK nationals than most of the social sciences. In 2003/4, around 40% of Middle East and African Studies staff, and 45% of Asian Studies faculty, did not hold UK nationality, higher than Economics (35% non-UK nationals). In the case of Asian Studies, more than three quarters of these do not hold EU or US citizenship.

We received 17 responses from Area Studies units to our survey, with 9 responses from American, Canadian or Latin American Studies departments. As American Studies tends to be dominated by humanities scholars, and supported primarily by the AHRC rather than the ESRC, this is not a group we had anticipated to engage. This may have been a mistake. As one respondent commented, *'American Studies in the UK is currently displaying a sharp deficit on the social science side'*, and this may be grounds for the ESRC to target American Studies.

Nearly all respondents to our survey had fewer than 20 staff in their departments. Whilst numbers of undergraduates were relatively low, several had sizable numbers of taught Masters students. Critical mass remains a concern, and since 2001, there have been a number of closures of high-profile Area Studies departments.

As one might expect, a wide diversity of emerging specialities and sub-disciplines were cited. 'Security studies' and other International Relations sub-fields were mentioned by several respondents, as was a growing student demand for Arabic language and Islamic Studies.

Recruitment and retention concerns

The majority of American Studies respondents did not cite particular recruitment problems, but five of the eight remaining departments did raise concerns, having unfilled posts in the last year. For those that did, inter-disciplinarity itself was mentioned as one cause. As one person put it, *'there is an emerging problem recruiting to an Area Studies department; in the current financial climate there is a perception that jobs are 'safer' in disciplinary departments with large undergraduate and taught postgraduate intakes.'*

One of our interviewees felt that the key challenge facing appointment boards in Area Studies was the difficulty of *'finding someone who has a really top reputation both in the Area and in the discipline... we often find the appointing bodies are split'*.

A further problem is the small size of the different Area Studies fields – each may have only a few designated posts, making an academic career within each of the 'Areas' unpredictable, dependent on funding fashions, and the vagaries of the related non-academic employment market. This makes a generalisation about an Area Studies recruitment crisis difficult to sustain.

What of Area Studies' highly visible reliance on international staff? As in other fields, opinion is very divided. Some see the recruitment of UK nationals into Area Studies as *'very important'* or *'crucial'*, but others are either not concerned or saw *'international recruitment (as) equally important to the recruitment of UK-domiciled staff'*. Several of those expressing concerns made useful elaborations, demonstrating that this has been an ongoing concern for the field:

'Well, I guess there are enough EU nationals with language skills to fill these posts, but the lack of UK staff to fill them is a definite problem' (European Studies)

'Yes, it is difficult to find suitable people especially in the social sciences. This reflects the fact that we are not training a sufficient number. The market in our field is international – and we lose some of our best people to the US and Australia. The UK has drawn a significant number in this area from the Netherlands.' (East Asian Studies)

'Staff with ability to teach Arabic, Persian and Turkish are extremely difficult to come by. Our department is one of the very few in Middle East Studies to have appointed a UK national to a permanent position in recent years.'

'This is an important issue in Chinese Studies. We increasingly rely on American PhDs to fill vacancies, both because the quality of UK/EU trained staff is less, and because there are so much less of them.'

Only one respondent mentioned retention as a concern, noting that *'we have a particular problem of losing excellent staff at senior lecturer level attracted to less stressful and high prestige, research based permanent or temporary posts often in other parts of Europe. While some of these staff come back after periods of leave of absence, many choose to stay on or find themselves offered early promotions at other institutions'*. Likewise, only one mentioned turnover, or the lack of it. They noted that within a small department, *'there is insufficient turnover; and there is little opportunity for growth, expansion or changes in direction'*.

Views on sustainability, training and internationalisation.

More than 80% of Area Studies respondents were concerned that the funding opportunities available for postgraduates and postdoctoral staff did not match growth fields in this subject area. Several cited the *'lack of language skills'* amongst UK students as a problem. Often there are several different factors that conspire to work against successful applications, as one respondent demonstrated:

'We get few applications from British postgraduates – and those who do apply have great difficulty obtaining funding in the very competitive ESRC competition. They may partly be handicapped by the fact that most of them are not graduating in a social science discipline, so it is difficult for them to complete a good 1 + 3 application. In practice, however, it is more time-consuming for students to acquire the necessary proficiency in an East Asian language to do a doctorate on East Asia than to acquire the necessary social science understanding. The situation is now serious. At present we have no British research student registered – for the first time since the Department's foundation in the 1960s'. (East Asian Studies Department)

The director of a high-profile European Research Institute pointed to the international competition for the best research students:

'We find it very difficult to compete with highly subsidised European academic institutions able to offer overseas students programmes at a fraction of the cost of that in the UK. North American institutions also take many of our best overseas research student applicants as they are able to offer bursaries of the order we cannot. The funding of competitive bursaries of postdoctoral fellowships would attract in the world's best, and for high-fee paying postgraduate research students and postdocs it and might encourage them to stay in the UK'.

Not everyone is so concerned. As one person put it, *'international recruitment is equally important as the recruitment of UK-based staff'*. He was the only respondent to put this development, and the needs of Area Studies in a broader policy context: *'it is clearly in the national interests to train a sufficient number of UK nationals – but the situation will not be resolved until the issue of support for undergraduate programmes in this area is addressed'*. He ended by reminding us that *'there is no practical government support for what are, by definition labour-intensive (and therefore expensive) programmes'*. Several respondents suggested ring-fencing funding for Area Studies specialisms and UK postgraduates.

Several responses revealed a tension between those staff trained in the humanities and those working within a social scientific tradition. One respondent, a US Americanist working in a Latin American Studies department, suggested that *'the natural evolution of Area Studies has been actively impeded by both the bias against inter-disciplinary work and the inherited notion that the field is narrowly empiricist, focused in small specialist institutions that cannot provide generic training'*. He felt that the ESRC had not been amenable to an *'inter-disciplinarity that has a very strong arts/humanities component'*, or to students wishing to change their research topics accordingly.

Another American Studies respondent noted that *'we have been unable to tap into ESRC funding and are totally reliant on the AHRC. With strong elements of economic history, international relations and social policy...we would like to have more recognition and encouragement at the ESRC level'*.

HEFCE 2005/24 identifies Area Studies as both a strategically important and vulnerable subject, and concluded that in relation to the study of several languages, it may need *'to take a more interventionist approach to subjects that add to the UK's political and cultural capital'*. It was this concern about declining numbers of qualified staff with adequate language and area skills that led to the new joint £80 million ESRC/AHRC/HEFCE initiative to support research capacity in strategic languages and areas. The choice of particular areas has been controversial, and the rationale for not including Africa and South Asia has been questioned by academics. This 'health of the disciplines' initiative does begin to address the concerns raised by Area Studies academics, though others are concerned that this just represents a short-term upswing in the cyclical nature of funding and policy attention to UK Area Studies since the 1950s. It also raises, once again, the broader question of the role played by Area Studies in relation to the UK's strategic interests, and whether there is an assumption that UK national staff are key to its health.

Summary

Area Studies departments have a highly international staff and student population. Nonetheless a significant proportion of respondents were concerned about the difficulty of training and recruiting UK nationals, an issue of importance to many. The ESRC's own requirements for social science training meant that in its 2001 Recognition Exercise some departments found it impossible to combine language training with the generic research training requirements. The HEFCE initiative was supported by the community (though some resented the speed with which it was implemented). It was echoed in further calls for 'ring-fenced' funding for particular Area Studies specialisms (and for UK students), following the precedent set by the AHRC in relation to Eastern European and Baltic Studies', and 'working closely with the AHRC to support inter-disciplinary exchanges between the humanities and the social sciences'.

Economic and Social History

The small number of UK departments that focus on Economic and Social History were well-represented by the eight respondents to our survey, all of which were departments rated '4' or '5' in the last RAE. If one assumes that Economic and Social History has a demographic profile comparable to the broader discipline of History, then this is a field where more than half of its staff are aged 46 or over; with 24% aged over 55 (higher than many of the other social sciences), suggesting a significant turnover of staff in the coming decade. History is a highly research intensive discipline, and more than 70% of its staff are male. Its staff-student ratios are equal to the sector as a whole, though departments had fewer undergraduates than many disciplines. Fields of growth in Economic and Social History included the links between environmental and economic history (3 citations), business history (2), and what one respondent called the coming together of household studies, gender, and welfare, both within and between households.

More than 80% of all History academics are UK nationals, but this figure is not necessarily representative of Russell Group institutions, where most departments are located. As with Linguistics, there are an increasing number of non-UK staff employed within these departments. This was not seen as a cause for concern by most. Responding on behalf of a leading department, one person commented that 'UK staff are difficult to hire, but there is no reason to focus on this market from a PhD body that is largely non UK. That is, fund overseas students and many will stay in the UK system.' On the other hand, they noted that 'this was partly because of a failure to recruit Europeans back from the US because of superior salary and housing allowances.' Another commented that 'as a member of an ethnic minority working in a nearly all-English Department, I think the more diversity the better'. More concern was expressed about retiring staff not always being replaced in a field that has seen a decline in student numbers, and one expressed anxiety about a loss of staff in the run-up to the next RAE.

The shape of the field has changed significantly over the years. There are two separate professional associations; and the Economic History Society is currently more active than its Social History counterpart. The relationship of the field with 'mainstream' History is locally variable, and partly depends on university administrative structures. In one Russell Group university, History has become a School of its own, reducing its links with the social sciences. According to one respondent, while a degree in Social and Economic History is still being offered, Economic History is increasingly dealt with in Economics, and has become highly econometric and statistical. Social History has suffered as fewer social scientists are interested in historical sociology and historical anthropology. On the other hand, mainstream History, partly influenced by the Marxist scholarship of the 1960s, has become increasingly interested in social scientific approaches, theorizing the processes involved in making history. He felt that another consequence of these changes in the approach to history has been the reduction of the use of statistical methods, and the decline of historical demography.

The field is aware of the challenge of falling demand at undergraduate level, especially for Economic History, and there is a review of the future of Economic and Social History being carried out by the Royal Historical Society. However single honours courses in Social History are beginning to emerge. The significant 'bulge' of staff approaching retirement are not necessarily being replaced. This too will have consequences, especially as many of these staff see themselves primarily as social scientists rather than historians.

As elsewhere, respondents had thoughtful ideas to boost the future sustainability of the field. These included extending studentships to non-EU students (*very good students who otherwise go to paid PhD studentship places in good US universities*), setting up a much bigger ESRC 3 year postdoctoral scheme equivalent to the AHRC scheme and more attention and money devoted to digital sources and initiatives. On the other hand, one respondent reminded us that 'intellectual disciplines must be idea-driven, not money-chasing'.

Economics

Concerns about the extreme difficulty of recruiting British students to do a PhD in Economics have been widely aired within the social sciences over the last decade. As a result there have been numerous investigations of Economics, including Oswald and Machin's influential and much-quoted survey *'Signs of Disintegration'* (1999). This concluded that relative pay was the key disincentive to pursuing an academic career. The Royal Economic Society Committee for Women in Economics has also tracked trends in the gender and ethnic composition of academic economists (e.g. Burton and Joshi 2002, Booth and Burton 1999).

More recently, Bell's (2004) survey of more than 40 heads of Economics departments exploring recruitment by nationality and RAE score, and provided a model for this Review's departmental survey. In this case study we bring together our findings and analysis with those from Bell (2004) in order to update the picture provided by earlier surveys.

Demographics – Age, Gender and Nationality

According to HESA data for 2003/4, 1300 Economics staff were employed in departments or units making returns to the Economics RAE panel, making the discipline roughly equivalent in size to Politics/IR or Sociology. Yet this figure represents less than half of all those employed in universities with a higher degree in Economics. Some may have been strategically submitted to Management and Business Studies in the 2001 RAE. But we also know from cost-centre data that more than 800 Economists and a growing number of departments are now located in Business Schools. Other Economists will be found in Development Studies, Social Policy, Economic History or Education. For this reason we can confidently describe Economics as an 'exporter' discipline, producing significantly more PhDs than can be employed within Economics departments themselves. As we discuss below, this has issues for disciplinary identity and for the perceived autonomy of Economics departments located within Business Schools.

According to HESA data on these 1300 staff, around 38% are aged 50 or over; and 21% over 55, figures that are roughly average for the social sciences as a whole (excluding Education, which has a much older workforce and tends to skew the mean). However they are significantly higher than Psychology and Geography (with less than 30% over than 50). Unsurprisingly, a relatively high proportion of these 1300 are professors (21%). Perhaps more worrying is that Economics departments have one of the lowest proportions of research-grade staff (8%) of the main-stream social sciences, a figure that has actually dropped by a third since 2000. This may be because research grade staff are moving into specialist centres.

With only 22% of all staff being women, Economics has the smallest proportion of female employees of all the social sciences. This percentage is changing very slowly, rising from 20% in 2000. One might take encouragement from the fact that around 37% of all staff under 35 are female. Yet even this figure cannot be taken at face value because women are proportionally more likely to be found holding fixed-term or temporary positions (34% of these are held by women). So of the 68 Economics researchers under 35, half are women. Of the 125 lectureships held by staff aged under 35, only 35 (or 24%) are women. Burton and Joshi (2002) and Booth and Burton (1999) present comparable findings from their earlier analyses, albeit based on Royal Economic Society (RES) postal surveys of Heads of Departments rather than HESA data.

What of the professoriate? Only 5% (15 out of 295) of Economics Professors are female, a figure that has not changed since 2000. This is the lowest percentage in the social sciences, and can be compared with a figure of around 25% female professorships in Anthropology and Sociology. Gender continues to be a major challenge. Only five women were appointed to permanent posts in the last year by the Economics departments responding to our survey. This is equivalent to 14% of the 37 appointments made.

Along with these continuing gender disparities, the most noteworthy aspect of Economics' demographic profile is its growing internationalisation. Currently two-thirds of Economics staff have British nationality, the lowest proportion in the social sciences, and this figure is lower in the RAE '5' departments. Given these trends, this figure is likely to drop much further. Only 45% of the 114 staff under 35 are UK nationals, a percentage that is matched only by Anthropology.

This national level HESA data is echoed and reinforced in the responses to our survey. Of the 37 permanent appointees in responding departments last year, only 14 held UK nationality (38%), and 13 held EU nationality (35%). This EU dimension is highly significant, for across all the disciplines surveyed, an average of only 14% of appointees were EU nationals. This echoes the analysis done by Bell (2004). He found from his survey of 40 departments that 40% of staff under 35 had done their first degree in Europe, more than the 36% who had completed their first degree in the UK. From

this he concludes that 'a large number of Europeans undertake postgraduate study in the UK and then stay on at a UK department', especially in the most research-focused departments.

In our survey Economics also stands out for having the highest percentage (40%) of staff whose highest degree was earned in the US, as compared to an average of 10% across the sector. This means that Economics staff appointed by the 10 responding departments in the last year were almost as likely to have US as UK postgraduate qualifications. The table below unpacks this career trajectory. The 12 UK citizens appointed in the past year had all done their PhD in the UK, whilst the 13 EU nationals were equally likely to have trained in the US as in the EU. Again these results reinforce the work of Bell, who found, albeit with a bigger sample size, that a quarter of appointees held US postgraduate degrees. The UK perception that the US offers a higher quality postgraduate training is reinforced by several of the qualitative responses to Bell.

Table 4.1 Permanent appointments in last year: Nationality and Country of highest degree

Nationality of appointee	Country of highest degree of permanent appointments in last year				Total
	UK	EU	USA & Canada	Rest of World	
UK	12	0	0	0	12
EU	2	5	5	1	13
USA & Canada	0	0	3	0	3
Rest of World	0	1	5	0	6
UK/Rest of World	1	0	0	1	2
US & Canada/Rest of World	0	0	1	0	1
Total	15	6	14	2	37

What do we know about student numbers in the discipline; is there a rise in demand? HESA data records that there were 31,500 Higher Education students (FTE) studying Economics at all levels in 2003/4, a figure that is broadly stable, but that there has been an increase in the number of research students in the discipline, suggesting a growth in demand. Together with Politics, they make up 4.0% of all research students in UK HE, up from 3.5% since 2002/03.

Departmental Survey

We did not initially seek to target Economics in our survey, partly because of the quality of the work carried out by Bell (2004). However, in circulating news of the survey widely across the sector, we received 10 responses from Economics, mostly from Russell Group institutions, representing 300 of the 1300 staff discussed above. Our analysis is complemented by some of the qualitative responses provided to Professor David Bell's survey, and also by interviews with human resources staff in institutions. The average department has 30 staff, though two departments stand out for having much larger numbers of staff (LSE and Manchester with 60 and 46 staff respectively). Three of the departments received a 5 or 5* in the last RAE and none were awarded less than 4.

As already noted, the numbers of staff were on fixed-term research contracts were low, with only 12% of all staff returned to our survey being on research contracts. Masters student/staff ratio and new PhD/staff ratio were around average for all the disciplines at 2:1 and 0.18:1 respectively

Recruitment and retention concerns

Unsurprisingly recruitment was a consistent concern for all departments who responded to the survey, given the plentiful availability of jobs for economists in the private sector. A comment such as '*the market for academic economists is very tight at all levels, but particularly at the professorial level*' was typical. One mentioned that the shortage of UK staff was not a problem '*provided there was a ready supply of good non-UK nationals*'.

Where were the particular areas that cause concern? Three departments singled out problems of recruiting '*staff with expertise in macro-economics*', and six of the nine unfilled posts in Economics over the last year were in Macroeconomics. Financial Econometrics was mentioned twice as an area in which it was '*especially hard to recruit*', whilst one person pointed to the difficulty of '*finding qualified environmental and resource economists*' as research staff. Three mentioned the '*challenge*'

of recruiting at the senior level, especially 'Professors with established reputations'. One noted how 'good female applicants for posts in economics at any level are scarce' and described their thwarted efforts to appoint a "good" applied economist (preferably female). They ended up appointing a male economic theorist, as these 'dominated the field of applicants'.

Staff turnover in Economics was regarded as a problem by one third of the departments, again, higher than all other disciplines. Some saw it as inevitable or presented it as a retention issue. As one put it, keeping key staff led to 'salary inflation and deficits: in turn these reduce our ability to hire'. Another reported difficulty in retaining professorial appointments in Economic Theory, whilst a third pointed to the problem that small departments faced of 'losing young high-fliers to the best funded departments'. One commented that 'UK financial packages – salary, research support etc – are not competitive with those offered in the US academic market or in the EU private sector' and that as a result they rely on non-UK nationals, who 'seek posts in their home country once they have established their academic reputations'.

One respondent called for 'greater flexibility in the determination of pay and conditions' and 'competitive remuneration packages' so that Economics can compete with the private sector. There is ample evidence this is already happening. As one senior administrator in an elite university admitted:

'We have made nine offers (for four lectureships), and are paying salaries that are way, way above, the standard scales, and we are not getting any yeses. It is as bad as that. What is happening is that people are getting hired away by Business schools in the States at salaries that are astronomic. We offered someone a 3 year post-doc, and he came back and told us that he was being offered \$150,000 by the University of Chicago'.

An indication of Economists' labour market value is that it is one of the few social science disciplines (with the exception of Management) to have any staff paid more than £100,000. Nine Economists are currently on 6-figure salaries, a proportion roughly comparable with the 1% of staff in Management and Business Studies who earn above £100,000 (HESA 2003/4). More than one third of the 300 Professors of Economics in the UK are now on salaries in excess of £60,000.

Views on sustainability, training and internationalisation

In their 1999 report Oswald and Machin suggested that the problem posed by a shortage of British-born economists was 'not that foreign-born economists will do a bad job', but rather that 'the unwillingness of British people to do the job may be a symptom that the job is not one that most talented people – of any nationality – would want'. Six years on several of their predictions and recommendations have come true. Academic economists are now being paid more, more funding is being directed to PhD training, and the concerns about the sustainability of Economics have moved steadily up the ESRC policy agenda. Yet, Masters students continue to be 'sucked' into the private sector and government employment by higher levels of remuneration. What more can be done?

Many of the suggestions for enhancing the future sustainability of Economics continue to focus on making academic careers more attractive. Half of the respondents pointed to the need to improve pay and conditions relative to those outside the HE sector; and several emphasised the need to offer more, and more generous, PhD studentships and post-doctoral fellowships to counter the 'marked tendency to exit graduate training following a Masters'. Two noted the 'returns available to economists with Masters level qualifications in the public sector (GES and Bank of England)', with one commenting bluntly: 'Stop the Government Economic Service poaching 1+3 students!' Only two specifically highlighted 'increased bureaucracy' and 'high and rising student-staff ratios' as likely to put off potential recruits.

Eight out of our ten respondents felt that postgraduate and postdoctoral funding did not meet the needs of growth areas within Economics. One pointed to the particular issue of postdoctoral funding, noting that 'there is not a long tradition of funding postdoctoral work, except perhaps in the area of health economics'. ESRC figures show a relatively low success rate by Economics students applying for ESRC studentships and postdoctoral fellowships. 38 of the 434 applications (9%) in the 2005 Postdoctoral Fellowship competition were for Economics, but only six were successful, a success rate of 16%, compared to an average of 25%. In 2004, 79% of applications for Economics 1+3 Studentships were 'A' graded, but only 25% of applicants were offered awards.

Some of the more targeted suggestions were particularly helpful. These included 'facilitating small grants for younger less established researchers' and 'funding and encouragement for ongoing PhD training/coursework post Masters (so that UK PhDs do not fall further behind leading graduate programmes in US)'.

An interesting idea, echoing a scheme currently run by the AHRC, was for an ear-marked pot of 'innovation' funds for ideas that are more risky than the norm' in each discipline – i.e. a small element of funding for grants that were specifically innovative. This, he suggested, would counter the inevitable conservatism of the peer review process.

Respondents to Bell's 2004 survey also had some valuable ideas. Three of the 26 respondents offering suggestions mentioned further training for postgraduates and post-doctoral fellows along the lines of the Royal Economics Society Summer Schools. Three also wondered about the possibility of 'recycling' studentships within Economics if students left after the first year of a 1+3 funded studentship. One proposed making more use of funded 'teaching fellowships' available for studentships. This would both boost the number of PhD students in an institution and 'reduce the opportunity cost' of doing a PhD, a cost which drives the high dropout rates.

In case there was any doubt about the key issue, 50% of Bell's respondents cited the importance of increasing PhD stipends and staff salaries for improving the sustainability of the discipline. Several also noted the supply-side dimension, and the importance of a campaign to persuade British undergraduates to continue to study a 'difficult' subject. It was not just undergraduates that needed wooing. One of our interviewees described how his institution had itself funded a set of postdoctoral fellowships in order to build up 'a cadre of post-doctoral fellows and to enculturate them in such a way that they are keen to stay'.

How concerned were people about the need to recruit UK nationals for the future of the discipline? Three felt it was important or very important, but the majority (7/10) were more pragmatic, dwelling primarily on the possible negative long-term implications of this reliance on European and international staff. One pointed out that 'the supply of good non-UK applicants for posts will shrink (as non-UK universities develop and become more competitive)' and so 'it is therefore important that UK universities remain competitive in the global academic market'. RAE income has fallen because, as one respondent to Bell's survey noted, 'many UK academics are not longer able to compete successfully in the leading US journals'.

Another raised a new problem of visa/work permit difficulties for non-EU appointments. Two suggested that it was necessary to have a proportion of staff 'familiar with UK society' and thus more likely 'to do research relevant to the domestic social science agenda'. On the other hand one suggested it was 'equally important to have a flow of ideas and people from overseas to keep the UK social sciences current and competitive'.

Sub-disciplines and emerging fields

Where do our Economics respondents feel that future developments within the discipline are? Several mention financial economics, and others point to the growth in experimental and new behavioural economics. Interestingly two also mention political economy and environmental economics as likely to 'make a comeback'. One respondent, himself working in an inter-disciplinary environment, acknowledges the rise of what he calls an 'important diaspora of economists who provide leadership in related or inter-disciplinary fields such as international development, health, innovation, international studies and social policy'.

The same respondent went on to point to the 'relative lack of support for young economic researchers located within – and sometimes transforming aspects of – major inter-disciplinary social science fields. Within this economic diaspora, the opportunities are rather patchy.'

A 2004 survey by CHUDE (Conference of Heads of University Departments in Economics) explored the implications of an increasing number of Economics departments being located within Business Schools. Almost half (25 of 54) of responding departments were so positioned, often because alone they were seen as being too small to be academically or administratively viable. One advantage was the possibility to recruit new staff given increased student numbers, but this was also seen as a double-edged sword. If numbers fell, the posts would be lost too. Adverse RAE outcomes have also had an impact. One respondent to Bell's survey suggested that these mergers were leading to 'economists being squeezed out in many universities', especially as students choose 'softer' options in their degree.

Summary

Our survey both confirms that there is a continuing concern over the recruitment and training of UK economists, and retention of Masters students onto the 1+3 programme. Despite salary increments, better remuneration packages and pro-active recruitment strategies, posts are increasingly being filled by EU nationals and by those trained in the US. Some of this is the inevitable consequence of the demand for economists' skills within a buoyant non-academic labour market.

Simply making more studentships available is unlikely to solve the problem, though offering full stipends to EU students would ensure that the best EU candidates applied to do PhDs in the UK.

Economics respondents did have a number of suggestions for strengthening recruitment and maximising retention at the PhD and postdoctoral level. These included inviting the Royal Economic Society, in collaboration with the ESRC, to host workshops for studentship applicants to improve the quality of applications and to support those applying for +3 awards during their Masters year. A series of national training workshops, 'master classes' and summer schools in Economics for PhD students and 1+3 studentship holders, were also seen as a way of developing an 'esprit de corps' amongst students. Other proposals included encouraging the ESRC to allow departments to 'recycle' awards when a student drops out after the first year; for the ESRC to reward departments that have the highest level of student retention, and for making earmarked grants available for innovative research in Economics, particularly targeted at young researchers.

Human Geography

Human Geography is one of the smaller research-focused fields, closely integrated with Physical Geography in most Geography departments, and submitted as a unified subject to the Geography RAE. The two disciplines are seen as strongly synergistic. As one person commented, *'the intellectual commitment to work across boundaries is really strong just now'*.

As might be expected of Geography's status straddling the natural sciences, the demographic profile of the discipline is one of the youngest in the social sciences. This is not just because more than 300 fixed-term research staff are currently employed in departments, making up more than 20% of all staff (after Psychology, Geography has the highest proportion of such staff), but also because more than 55% of permanent staff are aged 45 or under, equal to Psychology.

National-level data does not offer insight into the particular profile of Human Geography. The discrepancy between JACs and UoA populations may be the result of staff trained in the other natural sciences taking up posts in Geography.

One senior figure commented on how institutional changes within universities are reshaping existing research communities in Geography, especially when departments are relocated into predominantly science-oriented schools. Established staff, physically and conceptually removed from former research partners, can rely on existing research networks, whilst newer staff are more constrained by the boundaries created through such changes. As a result Human Geography can lose out on both university and research council funding because the ESRC and AHRC are more obvious funders than NERC or EPSRC.

As in other fields, the recruitment of senior staff and staff with good quantitative skills is difficult. Some emphasised the generational shift in the discipline: *'We have had great difficulty recruiting senior Human Geography staff (i.e. professorial level) to replace the cohort of 1960s appointments now retiring. We are effectively replacing professors with 'mid career' staff – senior lecturers and readers still in their 30s.'*

Growth areas include Economic Geography, political ecology and social and environmental justice. One said that *'the growth in culturally-related geographies is past its peak'* and that they expect *'growth to be concentrated in geo-political studies and globalisation.'* The same respondent goes on to say that *'the research councils are already spending too much money trying to spot and meet 'gaps' and 'opportunities'. Institutional initiatives are always likely to follow rather than lead research innovation.'* Other important growth areas cited are demography and health, and one respondent said that *'recent trends in funding and (the) RAE have encouraged departmental 'specialisation' within particular research areas.'*

Having access to a number of research councils did not seem to improve the situation for young researchers and PhDs: *'postgraduate funding is often problematic/not easy to acquire.'* This source went on to note a tendency to *'play safe'* with postgraduate research topics, *'making funding for projects that cross the science/social science divide more difficult to win. Postdocs tend to be funded through project grants and are a very useful resource. However, there is perhaps a lack of free-standing/advanced postdoctoral funding open to Human Geography.'*

Several comments dwelt on the discipline's utility, with one commenting that the social sciences as a whole needs to situate itself with regard to *'contemporary developments in society'* and *'that without relevance to society then UK social science will not prosper. If you need investment then you need to offer a "valued" product.'*

One Russell Group respondent criticised the quota allocation of 1+3 awards: *'too little consideration has been given to the very variable, and very damaging, different geographies of the result'*, before calling for a *'spread of the resources, not a de-facto*

concentration'. There is the view that *'the allocation policy should be flexible enough to respond to excellent opportunities wherever they are as long as they can be clearly demonstrated.'* However, it was felt that *'research councils have been more responsive to the peculiarities of Human Geography than universities, and the subject is well represented'*.

Some degree of internationalisation is accepted as inevitable, with the familiar caveat that a strong UK-domiciled staff base is crucial for long-term sustainability. Looking to the future, several pointed to the importance of further enhancing the quality of undergraduate teaching, and especially the teaching of quantitative skills. Geography has an excellent record of innovative teaching practice and pedagogic scholarship, and in this field could act as a role model for the other social sciences.

Linguistics

Linguistics is a relatively small but highly research-intensive discipline. In the 2001 RAE, 210 research active staff were submitted in 21 departments (87% of all staff). HESA data for 2003/4 records a much higher population of 574 staff in Linguistics, many of whom seem to be working as language teachers and TOEFL trainers in the field of Applied Linguistics. HESA also records around 850 students a year graduating at undergraduate level, with 375 research postgraduates in 2003/04.

After some well-publicised departmental closures, the relevant professional bodies joined forces to set up a Linguistics Strategy Group in 2004, with a remit to investigate a possible decline in student interest. So far there is no evidence to support this interpretation, and the closures seem to have been more a product of RAE-based strategising at institutional level. In this respect it is interesting that Linguistics had already seen a significant reduction in the size of the disciplinary RAE submission between 1996 and 2001, again this seems to be a product of institutional strategising rather than any genuine reduction in research activity.

Nevertheless, the shifting institutional environment makes exact computation of the population of research active staff in Linguistics even more difficult than in other disciplines. This is compounded by Linguistics' positioning in a complex inter-disciplinary field with heavy overlap with the humanities (historical linguistics and foreign language teaching and learning), the social sciences (most obviously socio-linguistics), and the sciences (neurolinguistics, speech processing). This in turn is reflected in a complex pattern of support for research and postgraduate training. As one senior figure put it: *'different parts or kinds of linguistics are funded by ESRC, AHRC, EPSRC, and very rarely MRC. No research council would be able to find reviewers, panels, or comparator projects for all of it. The same is true in France and US.'*

In 2002/3, when the then AHRB solicited bids for possible ring-fencing of postgraduate awards in priority areas in the arts and humanities, the Linguistics of Modern European Languages was identified as one of five key priority areas. One route into a career as an academic researcher in Linguistics has always been through foreign-language study at undergraduate level: the well documented crisis in language teaching at school level in the UK is thought to have impacted on this potential route to academic recruitment at postgraduate level. It is also likely that would-be researchers coming in through this route are not well served by 1+3 programmes with a heavy concentration on generic social research methods in the '1'. In the 2004 interim allocation of 1+3 ESRC quota awards, only 2 departments (Edinburgh and Essex) received quotas in Linguistics.

In our survey of Heads of Departments we had seven responses from Linguistics departments, all of which were ranked 5 or 5* in the 2001 RAE (out of a total of 12 departments so ranked). Most of the departments are relatively small, with less than 10 research students starting each year. After Sociology, Linguistics has one of the highest proportions of staff (40%) aged 40 or over, suggesting a significant turn-over of senior staff in the next 15 years.

A diversity of sub-disciplinary fields were listed by respondents. There was some agreement that the growth fields in the subject included corpus linguistics (3 respondents) and socio-linguistics (2 respondents). One also commented that *'Brain-imaging techniques of various kinds will inevitably become more prominent in the near future'*.

Attitudes to recruitment confirmed national-level data which show Linguistics to have one of the highest proportions of non-UK nationals in its academic staff. Whilst four of the seven respondents reported no recruitment difficulties, two of the remaining three pointed to their appointment of *'overseas candidates'*, with one noting that *'the pool of well-qualified British candidates appears to be very limited'*. In the same vein, two others pointed to retention problems. One noted that *'international mobility of staff is a fact of life'*, and another warned that there was *'always the risk of losing bright young researchers to North American institutions'*.

How worried were our respondents about this trend? The majority did not see it as a concern, with one commenting that *'staff could be from anywhere'*, and another that *'as long as qualified staff are willing to apply, our discipline is sustainable'*. However, one thoughtful commentator pointed to potential losses of trained research staff, noting that *'it is important that the early careers of people who want to make their careers in the UK are properly managed. At present, both the material and the intellectual rewards of moving to North America at or during the postdoctoral or junior lecturer career phase are disproportionate; most UK institutions simply cannot compete'*.

On the whole, our respondents were confident about the future of their field. One commented that *'we are seeking to redress a top-heavy age profile, but we are able to do this to some reasonable extent'*, whilst another noted that *'our problems lie in obtaining posts to meet student demand'*.

Politics and International Relations

Politics and International Relations (IR) is one of the few research-focused disciplines that does not 'export' its doctorally trained staff. Nearly all the 1400 staff now working in Politics and IR departments were trained in the field. Few with this training are employed elsewhere in UK universities. It has one of the lower proportions of fixed-term research staff, with only 160 such staff. For the social sciences, Politics has a young staff age profile, with more than half of all permanent staff aged under 45. However it does have a high proportion of male staff (75%), who are predominantly white.

Politics and IR stand out as having high numbers of taught Masters students, almost four times as many as Sociology, a discipline of a comparable size. 45% of all the 5800 postgraduate students registered in 2003/4 were 'international' (i.e. non-EU) students paying full fees. One senior figure expressed concern about the lack of learner 'autonomy' amongst such students. There has been a good deal of teaching innovation within the discipline, including work on placements, case-based learning and skills-training, as a way of enhancing the vocational opportunities opened up by a Politics degree.

What are its growth areas, as recorded in responses to our survey? Some are predictable. More than a third pointed to *'security studies'*, and others noted the study of risk, terrorism and new forms of governance. There is a growing popularity of International Relations more generally amongst undergraduates. After a recent decline, student applications to the field are once again increasing. However, one dissenting voice noted that *'in the new universities, Politics is not an area of growth and is in danger of being submerged within larger units comprising sociology and Criminology'*. De Montfort University was the only post-92 institution to be awarded a '5' in Politics in the 2001 RAE. Similarly, only two of the twenty-two responses to our survey were from post-92 institutions.

Half of our respondents reported having no recruitment problems. Applications for entry level posts were reported by one person as being *'very strong'*, and another noted that *'even fixed term and temporary posts attract a lot of interest from well-qualified candidates'*. As with Anthropology, concern was instead focused on the difficulty of appointing people to chairs without *'further debasing the currency'*. Four respondents pointed to problems of recruiting in International Relations, and especially finding *'good International Relations lecturers with good methodological skills and a real understanding of research design'*. As one respondent went on to note, the difficulty *'reflects the way in which many British International Relations departments approach their subject matter'*.

Turnover was seen as a *'fact of life'*, and an opportunity rather than a *'problem'*. However, as one person insightfully noted, *'It could become a serious problem in the era of variable fees if the income disparities between institutions becomes so great that a heavy concentration in a few years becomes the norm.'*

As in the other disciplines, there was a difference of opinion about the internationalisation of Politics departments. Several pointed to *'a most worrying trend'*, namely a shortage of UK-nationals studying at the Masters and PhD levels. As one put it, *'something needs to be done to halt the decline in full-time Home Masters students'*. They blamed financial difficulties and a lack of funding for UK students. One commented that *'numbers of international postgraduate research students in Politics now significantly outstrip those of home students'*, as departments respond to the demand for places from non-UK nationals. This strategy leaves them vulnerable to the financial risks of a sudden down-turn in student numbers, and is perhaps one of the biggest challenges facing the discipline. A few are more optimistic about the trend, with one noting that *'we have made good use of Foreign and Commonwealth Office funds and Chevening scholarships for international recruitment'*.

Two comments on the growing reliance on international students and staff were particularly instructive. One noted that *'It is very important to produce postgraduates who can compete with the best the global market has to offer'*. Another pointed

to one of the implications of the fall-off in domestic postgraduates – a lack of UK candidates for jobs: *'My experience is that the emphasis on the RAE tends to favour US and non-UK candidates for recent jobs. This suggests either a failing of training for UK students to develop a CV which looks good in terms of (the) RAE, or a lack of good students being fed through. I think it is probably a mix of both'*.

Finally, and perhaps unsurprisingly, Politics respondents were acutely aware of the economic and political pressures facing academics and students in UK Higher Education. Many called for better funding and working conditions. One respondent commented cogently on how these pressures created contradictory demands: *'The RAE creates one set of pressures and the need for quality teaching another. Staff face high pressure because of the large number of students that have to be taught and the need to publish in high quality journals at the same time. There is a need to ensure that the space for each activity – teaching and research – is maintained without detriment to the other.'*

Psychology

Psychology is a major bridging discipline between the natural and social sciences, and closely resembles the natural sciences in some aspects of its demographic profile. One quarter of all staff are on fixed-term research contracts, higher than all other social sciences and similar to the proportion in Earth Sciences. 40% of all staff are on fixed-term contracts. It has a relatively 'young' demographic profile, with more than a third of its staff under 35; double that in many other social science disciplines. Amongst those staff under 35, 70% are on fixed-term research contracts, raising questions about their future career progression. The field's age profile is not determined by this community of research staff, as more than 55% of permanent staff are less than 45 years old, again higher than the other social sciences. Half of all staff are female, though men in the discipline are slightly more likely to hold permanent posts.

It is difficult to delineate those academic staff involved in the 'social scientific' aspects of Psychology. Like Geography, it espouses an identity that crosses the natural and social sciences, and respondents similarly vary in their definition of both.

Psychology's natural sciences research profile is echoed in its success at accessing funding from a number of research councils, including the MRC, BBSRC and NERC, as well as the ESRC. Whilst this inter-disciplinarity is one of the discipline's strengths, one respondent sees this *'falling between stools'* as a problem, noting that *'the biggest problem for Psychology is that some topics can fall between the remits of the different research councils'*. He felt that, as a result, there was a gap in funding for innovative work. Psychology is an 'exporter' discipline to Education and Business Schools, and the latter currently employ more than 220 staff with training in Psychology.

We received a large number (46) of responses from Psychology departments, with 40% of responses coming from post-92 institutions. People were optimistic about the future of the discipline, with many listing a variety of growth areas. Forensic psychology and neuroscience were both cited by many as particularly innovative fields, with one person noting that *'recent advances in technology have led to the growth of research that applies cognitive neuroscience techniques to all areas of investigation, (e.g. perception, attention and motor sciences; learning, language and development; clinical and health psychology)'*. These were also areas where several institutions reported difficulties in recruiting staff. Collaborative projects with other sciences (such as computer science) and sport and exercise psychology were also cited as areas of growth.

A number of departments reported recruitment and retention difficulties, but the percentage of unfilled posts was no higher than in other disciplines. As in other fields, senior staff are seen as being 'in short supply' – one respondent suggested that *'several departments are chasing the same small pool of high calibre candidates'*. This also linked to retention issues, for as another noted, *'those staff who move tend to be "poached" by other institutions worried about the RAE, and so are more likely to have attractive research profiles'*. Of the nine professorial appointments reported unfilled in Psychology, six were in 5 or 5* departments. One department in the South-East reported having to *'appoint near the top of the scales or get nobody... this means that people are looking for promotions somewhat earlier than in the past'*.

Whilst being a strongly research-focussed discipline, people also expressed concerns about the lack of a career structure for contract research staff. *'Research staff with a year or two of postdoc experience may leave for apparently more secure posts (lectureships, civil service, or training as NHS clinical psychologists'*. Although Psychology is not primarily practice-linked, there are explicit professional paths, and there is a degree of outflow to (better-paid) jobs in clinical and private practice. There is some inflow too, of practitioners, but as one person noted, *'it is difficult to recruit from practitioner domains (e.g. forensic psychology) and get staff who are also research active.'* This is a recurring problem where there is a direct link to the professions. One respondent claimed that *'UK clinical psychologists are virtually impossible to recruit into academia – we had*

to bring one from abroad on a work permit. Also bio-psychologists are very few on the ground, and there is an over-supply of cognitive psychologists, as this is the main emphasis of top research departments.'

The field has fewer non-UK nationals than Biology and Chemistry, both of which are fields that attract high numbers of international research students. Staff attitudes to internationalisation are as varied as in other fields. Several cited a shortage of UK nationals applying for jobs: *'when we recruit staff we tend to attract at least four applications from overseas for every UK one...this is likely to lead to melt down.'* Another noted that *'approximately a third of our staff were recruited from outside the UK...A proportion of these staff may challenge 'sustainability' in time by leaving the UK'*. Again one encounters contradictory assessments, with one respondent seeing UK-domiciled staff as crucial, *'although we could not operate as a department without overseas staff and research students'*. Another framed it more positively: *'we are working in an international market, we must compete at that level and that means that the best departments will tend to have quite an international flavour'*. Comments about the necessity of competing internationally tend to be made by the very best institutions and departments.

In terms of sustainability, many called for a more flexible approach to funding, especially at the postgraduate and postdoctoral level, perhaps linking research grant funding to *'a doctoral training account scheme'*. The problem of multi-disciplinary funding was raised: *'as (research) gets more multi-disciplinary and applied, so it becomes less obviously RAE-worthy....Research councils should decide what they are funding research for – is it solving immediate real world problems, or is it enhancing the totality of mankind's knowledge? It is difficult to do both on a limited budget.'*

Psychology shares areas of anxiety with the other social sciences, but on the whole it is a healthy, vibrant and strongly research active discipline. It seems to have close links with practitioners who maintain a strong identity as psychologists, despite the difficulty of recruiting practitioners back into academia: there does not appear to be the chronic problems experienced within Education and Management and Business Studies. The most consistent concern was the paucity of UK-domiciled candidates for jobs. As an exporter discipline, and one with clear career paths taking professionals away from academia, this might point to future problems.

Sociology

Sociology is the fulcrum, and engine, for a wide area of scholarship across the social sciences. The growing diversity of disciplinary sub-fields, and the breadth of sociologically-inspired work, is seen both as Sociology's great strength and its potential Achilles heel. A recent debate in Sociological Research Online (Scott 2005, Urry 2005) sets out some of the issues. Whilst the protagonists agree that Sociology's flexibility allows it to open up new fields of research in response to the vicissitudes of social life, they disagree over the importance of a shared theoretical base and autonomous disciplinary identity from which to engage in interdisciplinary debate.

The backdrop to this debate has been changing patterns of student recruitment. There has been a drop in undergraduates taking straight single honours Sociology degrees, but this is being replaced by the growing popularity of more specialised degrees – like Criminology – as well as joint honours programmes offered by Sociology departments. Given the financial significance of overseas postgraduate students, some staff are also worried by recent falls in recruitment.

Proportional to the size of the discipline, we received one of the highest response rates for Sociology, with nine of the 29 responses coming from post-92 institutions. A number were from broader Schools of Social Science, often incorporating Social Policy, Social Work and Criminology. A large number of specialisms were cited as areas of disciplinary growth. Nine pointed to Criminology, several cited race/ethnicity/postcolonial studies, others globalisation, and others still aging. Two noted that media and technology studies were experiencing a renaissance. One view would be that our survey evidenced innovative and expansive thinking within the discipline. However not all welcomed the growth of these sub-fields. One respondent commented that, *'Sociology has too many sub-fields as it is. The ones that appear to be "growing" mostly have nothing to do with social science as I understand it.'*

Sociology staff work in a diversity of institutional settings. 3200 staff employed within UK universities have a higher degree in the discipline, but only half work in departments or schools that made a submission to the Sociology panel in the last RAE. Around 900 staff (63% of staff in those departments) were submitted as research active in 2001. Even allowing for RAE 'game-playing', we would suggest that Sociology is one of the major 'exporter' disciplines. Two different explanations can be advanced. Staff chose to 'migrate' into other multi-disciplinary fields such as Criminology, Social Work, and Socio-legal Studies as well as to Business schools, as job opportunities arise. Such migration is also organisationally driven, as institutions amalgamate their provision into larger inter-disciplinary schools.

This has prompted a fear that even those academic staff within Sociology are more likely to identify themselves with their particular research specialism than the discipline itself. This development is also driven by the launch of more specialised degrees, with staff being specifically appointed to teach these specialisms. One senior figure suggested that this led to less of a 'collective identity' within departments that were increasingly diverse, and also presented membership problems for the British Sociological Association.

With the dramatic growth in students studying, and staff appointed to teach Criminology, one commentator asked *'How much longer can we go on as part of a single department? Sociology departments are concerned to represent their field, but that's hard given the demographics'*. He felt that given Criminology's inter-disciplinary approach, many of these new staff wanted to remain within Sociology departments, but they were also seeking greater autonomy for their specialism.

In relation to this, several commented on the tensions within the discipline. One highlighted the need for a greater interface *'between theory, methods, and substantive empirical work'*, whilst another appealed for *'more emphasis on bringing a serious engagement with theory into dialogue with empirical research.'*

How did people feel about funding opportunities? One pointed to the growth in *'research between social and natural sciences'*, but noted that this was *'very difficult for social scientists to get into'*. Was funding being directed at these new fields? One commented that *'sustained development of new areas requires more continuity of funding at postdoctoral level'*, funding that is not always available, with another adding that *'relatively small numbers of PhD awards may place limits on achieving critical mass in emerging substantive areas'*.

Relative to the other disciplines, recruitment was less of an issue of concern than staff turnover and student funding. Several of the respondents raise the specific issue of the looming *'retirement bulge'*. One interviewee felt that there was a *'missed generation during the 1980s when there wasn't recruitment'*, leading to a *'very limited'* pool for more senior recruitment. As another put it, *'We need a massive increase in PhD studentships. Quite simply in Sociology there will not be enough qualified staff to fill positions in five years time as retirements start to impact. To fill the positions that will arise in sociology in the next ten years I would estimate that the country has to double its production of Sociology PhDs in the next few years'*. A third opined that *'it is crucial that a stream of younger academics is available, given the demographic fall-out likely after the 2008 RAE.'*

How objective are such claims? As we show in chapter 5, amongst the research-focused disciplines, Sociology has the highest proportions (42%) of staff aged 50 and over, compared to 37% in Economics, 34% in Politics, and 30% in Geography. This reflects the large expansion in the discipline in the 1960s, and is likely to lead to a significant turnover of staff in the coming years if all existing posts are replaced. Whilst the case of Chemistry in the 1990s demonstrates how the age profiles of disciplines can quickly change without long-term damage, it would also seem important that there is a strong pool of applicants for such posts. In this regard, Sociology's recorded population of 860 full-time research students (HESA 2003/4) is proportionally smaller than the number of research students in Anthropology, Politics and Economics, relative to total staff numbers.

As in other fields, this concern with opportunities at the postgraduate and postdoctoral level is linked to limited opportunities for funding and low starting salaries. Comments included a *'key problem is providing opportunities for part-time, research, and temporary staff to develop long term careers'* and *'It would be useful to incorporate postgraduate studentships in research grant applications. Postdoctoral funding opportunities are insufficient'*.

Echoing views expressed elsewhere, post-1992 university departments cite the loss of young staff to Russell Group institutions as a problem: *'investing in younger staff can make it easier for them to move on. Two younger staff members have left in the last two years'*. One interviewee noted *'a lot of sideways movements from one chair to other, rather than new appointments to chairs'*.

Finally several also emphasised the necessity of popularising social science more generally: *'We need the resources to identify the opportunities for the application of social science knowledge to issues and problems as they arise in the political realm, mass media, industry, commerce, civil society and the public sector. We need to think about initiatives for embedding social scientists and raising the relevance of social science knowledge'*.

In summary, Sociology faces a greater turnover of staff in the next five to ten years than the other research-focused disciplines. The large number of posts recently advertised suggests that this in turn offers important opportunities for renewal. However, the growing popularity of Criminology and other specialist degrees may pose difficult questions for departmental and disciplinary coherence, given the changing identities and affiliations of staff. It may also be that a limited pool of UK-trained applicants increasingly leads departments to seek international staff to fill their posts, especially those in more senior positions.

Advanced Quantitative Methods

A quantitative 'deficit' amongst UK social scientists has been a policy concern for the Government and Research Councils for more than a decade. In 1999, the ESRC commissioned a Research Methods Programme to promote a network of projects in methods training and research, of which a sizeable proportion have focused on quantitative methods. This, along with a number of other national initiatives, has begun to address issues of research capacity in this area, but can do rather less about the 'supply' of postgraduates, given the seeming unpopularity of quantitative subjects at school and amongst undergraduates, or about the quality of some methods training. Initiatives continue, the latest being a forthcoming review of university statistics teaching, including service teaching by COPS (Committee of Professors of Statistics).

The recent HEFCE statement on 'strategically important and vulnerable subjects' (HEFCE 2005/24) comments that quantitative social science 'is a particular concern to the ESRC, as supply is seen as insufficient, particularly as this subject underpins other disciplines'. As the report implies, there are two different issues to be explored. One is the survival of quantitative disciplines like Social Statistics and Demography, given the decreasing numbers of students choosing to study these disciplines at undergraduate and postgraduate level. The other is the 'supply' of staff with advanced quantitative skills across the social sciences more generally, be it in Social Policy, Sociology, Politics or Geography. This case study addresses each aspect separately, for the future of the quantitative social sciences is not necessarily dependent on Social Statistics retaining a distinct disciplinary identity. (Economics is the subject of a separate case-study.)

Demography and Social Statistics: Staff Age, Gender and Nationality

It is not easy to 'isolate' social statisticians, and one respondent described the discipline as a 'curious hybrid'. Within many universities, statistics is seen and taught primarily as a sub-discipline of mathematics. This makes the discipline less visible and of lower status, exacerbated by a drop in student demand and the closure of up to ten Statistics departments since the last RAE.

HESA data on statistics per se is thus of limited help in understanding the particular pressures facing the sub-field of Social Statistics. But what does it tell us about the field as a whole? 793 people (staff FTEs) working in Higher Education in 2002/3 had done a higher degree in statistics. There is a relatively lower proportion of older staff because 44% of all such staff are on fixed-term research or teaching contracts, a much higher proportion than in most of the social sciences.

According to this data, only 71% of all staff under 35 held UK nationality in 2002/3, compared to 83% in 1994/5. This relatively high figure demonstrates a growing reliance on an increasingly international labour market for those with the requisite skills in statistics and operational research. Women tend to be disproportionately represented in those holding fixed term research contracts.

The 2001 Statistics and Operations Research RAE panel overview raised concern about the overall age profile of the subject, particularly what it described as a 'decline in the numbers of PhD students'. The evidence collected during the course of this survey suggests that PhD recruitment (in terms of both quality and quantity) remains the primary concern. This is partly the result of a significant and continuing decline in full-time undergraduate students. Without the financial 'buffer' provided by undergraduate numbers, the field is vulnerable to institutional restructuring.

Departments of Social Statistics

In order to survey social statisticians, COPS (Committee of Professors of Statistics) circulated information about our web-based questionnaire around Statistics departments, asking for it to be filled out only by those whose research interests 'clearly intersect with the social sciences' e.g. social statistics, epidemiology, public health, demography or economics.

There are less than a dozen departments of Social Statistics, and research expertise is concentrated in a number of centres of national and international excellence (e.g. those at Southampton, LSE, Essex, Surrey and Lancaster). The 6* department of Social Statistics at Lancaster, recently awarded a CETL and currently recruiting new lecturers, hosts the Centre for Applied Statistics. This is one of six nodes of the ESRC National Centre for Research Methods, with a specific focus on quantitative developmental models. Southampton has also been strengthening its expertise in social statistics, and provides the 'hub' of the National Centre for Research Methods. We also received responses from the LSE, the Centre for Medical Statistics at Liverpool and STORM at LMU. Each had rather different concerns. As a result we supplement our analysis with a number of follow-up phone interviews, and survey responses provided by directors of the relevant ESRC resources investments.

60% of respondents to our survey reported difficulties with recruitment, with one respondent noting problems faced in recruiting lecturers in Demography and statisticians of all grades. Of the five questionnaire responses received, the main focus of attention was on the importance of Masters courses and associated grants for attracting students into the discipline. One respondent felt that the drop in PhD students coming into Statistics had been caused by the demise of EPSRC, MRC and ESRC MSc quota awards. At one point, departments would have been able to apply for Masters studentships from all three research councils. In the EPSRC's case, this has been replaced with the EPSRC doctoral training grants, but these are linked to the overall research grant received by a department. As a result a small statistics group within a larger department is not necessarily able to offer its own PhD studentship as they are *'fighting for doctoral training grants against their mathematical colleagues'*.

Several commented favourably about the high quality of young European staff, but also about the discrepancy between the size of stipends offered to Marie Curie fellows and those offered to ESRC postdoctoral fellows. This made it harder to attract strong European applicants. There was also concern about the insecurity of a one year postdoc, with one respondent feeling that *'at present you risk funding just the people who are unable to get jobs elsewhere'*.

The drop in numbers of Masters students had a consequent effect on the labour market. According to one interviewee, *'Masters courses were attractive to many students, some of whom wouldn't have gone on to a PhD'*. He went further: *'I would employ someone with a Masters – they'd be more employable, because of their wider skill set'*.

Several of our respondents commented on a particular shortage of people with applied statistical skills, noting a *'divide between methodological development, which is driven by data, and the application of data'*. Here the non-academic labour market value of statisticians became very apparent. Applied Statistics is seen as particularly vulnerable, because of the demand for these skills in the financial services and pharmaceutical industries. According to one person, *'Glaxo has six senior statisticians – four are Russian speakers. Basically the British ones don't exist'*. The same person felt that this shortage was exacerbated by a prejudice against applied work, such that *'the EPSRC think that the only statistics worth funding was mathematical statistics'*.

Most mentioned supply-side issues limiting the quality and quantity of research students. These included the poor quality of statistics teaching and statistics CPD (Continuing Professional Development) in schools, the closure of university departments (leading to fewer undergraduate courses being offered in statistics), and the patchy nature of the service teaching of statistics.

What of the ESRC-funded Research Centres? One director reported on his centre's inability to recruit *'a suitably qualified statistician with an interest in the social sciences'*. None of the applicants for a position in social statistics had a background in the field, and he felt that the small numbers of social statisticians with postgraduate qualifications were insufficient to fill the variety of jobs available. He insisted that *'social scientists trained in quantitative methods were not an alternative route for recruitment'*. Another centre director commented on the lack of applicants trained in handling longitudinal data sets. Once appointed, she noted the importance of retaining such staff to ensure continuity. She added that *'Long-term contracts would help, not a series of short-term contracts such as those from government departments'*.

Quantitative Skills across the Social Sciences

Apart from Economics, how do the other disciplines that depend on quantitatively trained staff perceive the current 'deficit'? More than a third (6/17) of the geographers who responded cited a shortage of economic and quantitative geographers as causing recruitment problems in their field. Examples of comments include: *'Good Economic and Quantitative geographers are hard to find'*, and *'postdoctoral research staff with good quantitative skills, especially in longitudinal analysis'* are very difficult to recruit. Another commented that *'Appointments in economic geography are often the most difficult to fill given the very high standards we set, especially at senior level'*. On the other hand, Economic Historians reported few recruitment or retention difficulties, except at an elite London department that found itself competing in a US labour market.

Concerns about the growing need for, and shortage of, people with quantitative skills were also voiced in other quarters. One Town and Country Planning respondent noted that in their field *'monitoring and evaluation have become more important elements of decision making, albeit linked to community needs and aspirations'*. They felt that *'these harder technical skills are becoming more relevant but scarcer'*. A Social Policy respondent mentioned that *'it may be necessary to recruit out-with the UK to obtain the necessary methodological expertise especially in quantitative research.'* Yet in total only 25 of our

317 departmental respondents, 8% of the total, cited the deficit of quantitative skills as a concern, suggesting that the problem is felt most strongly within particular sub-fields and institutions.

Suggestions for solving recruitment problems included *'more quantitative funding at postgraduate level'* and *'more quantitative training at the undergraduate level'*. One senior social statistician suggested that *'the problems in recruitment for quantitative social science need addressing at the undergraduate level, and that a quantitative course should be part of every undergraduate syllabus in sociology, criminology etc'*. He went on to note that *'Research methods courses at this level often focus exclusively on qualitative methods'*. Others commented on the high levels of quantitative numeracy amongst graduates from Italy, Germany, Spain and the US.

What about more quantitative research training at the postgraduate level? One respondent commented that *'students need to be motivated by staff with a strong interest in both statistics and in social science problems'*. But this is not easy, and is not achieved through making quantitative methods courses compulsory. One senior figure commented that *'doctoral students are having to do broad methods training...but this is not going to change anything fundamental – its not seen as something you are really interested in, but something you are forced to do'*. She felt that the system of quota awards was not necessarily a solution. *'We've gone for quota awards because we know we'll get them, and then we've got to find the students ...we suck people in because there is money there. It can be a hard process, because they aren't necessarily doing what they want to do. In terms of our UK recruits, we are scraping the bottom of the barrel'*. Others felt that Government and other social research organisations that employed statistically trained staff needed to play their part, with more CASE -type studentships specifically focussed on quantitative problems.

Summary

The shortage of research staff with advanced quantitative skills is not a problem that the ESRC alone can resolve. There are number of reasons for this shortage, including the marketability of quantitative skills in the broader labour market, and the shortage of students coming through the system. But there are actions for the ESRC can take. One would be to liaise more closely with the EPSRC in jointly providing quotas for Masters courses. Masters programmes play an important role in providing trained social statisticians for a broader labour market. Our respondents' comments about the possibility of the ESRC integrating PhD studentships within large quantitative research projects, and the role of one-day workshops and summer schools in quantitative methods, also offer valuable pointers for future policy development.

Key Findings

- The eighteen disciplinary case-studies included in this report divide the social sciences into two broad categories of 'research-focused' and 'practice-linked' disciplines. Drawing on extensive interviews as well as the qualitative data collected in a survey of 320 departments, the discipline-centred view they present complements the picture provided by national-level data.
- Education and Management and Business Studies stand out from the other social sciences by virtue of their size, numbers of taught postgraduate students, the complexity of their sub-fields, and their unusual age and job-grade profiles. However they share with a number of other practice-linked fields a common concern to sustain and develop their autonomous research capacity.
- ^a The case-study in advanced quantitative methods also shows that research capacity in quantitative methods remains a concern in specific fields across the social sciences.

‘The seemingly healthy picture of staff recruitment has to be related also to areas of shortage’



5 Recruitment and retention across the social sciences

Introduction

Concerns about the age profile of academics in UK universities – what some have described as a demographic ‘time bomb’ – are not new. Since the 1990s there have been warnings that the profile was dangerously skewed (Keep et al 1996), as staff appointed in the 1960s expansion neared retirement. More recently the growing recruitment of international staff has provoked similar anxiety. Building on the evidence provided by discipline-based respondents as well as national-level data, this chapter explores these concerns across the social sciences.

Recent evidence on recruitment and retention

The annual survey commissioned by UCEA of staff recruitment and retention (e.g. UCEA 2002) highlights pressures facing particular disciplines and institutions, and has been the basis of some of the recent ‘crisis’ claims. The survey is based on employer perceptions of recruitment and retention problems. These are seen to be worsening. Around one in five reported problems in 2001, as opposed to one in twenty in 1998. It notes how ‘increased competition from organisations elsewhere in the public sector’ is joining the private sector in affecting recruitment problems, with working conditions being as significant as salary in factors affecting recruitment. In reality, this meant that candidates were often not of the requisite quality. The social sciences recorded as having the most problems in the 2005 survey were Business, Management, Law and Economics and Education. It also points out that sometimes turnover is lower than desirable, with some institutions unable to revitalise their staffing.

HEFCE’s own investigation into likely future staffing trends (HEFCE 2002) was the first to question the notion of a major recruitment problem in the sector. The report developed a sophisticated predictive model of leaving rates for permanent staff according to their gender, age, grade, research activity and subject group. It concluded that ‘the proportion of staff aged 50 or over will stabilise’ and that ‘the current age profile will not lead to a marked increase in the overall leaving rates: so current recruitment is sufficient to maintain current numbers’ (2002, 3). It pointed to the fact that recruitment, rather than retention, is often the key issue for institutions. It also notes a trend towards an increasing proportion of female staff, and of staff in higher grades.

Its analysis of the dynamic aspect of disciplinary age profiles is important. It demonstrated how a highly skewed age profile for Chemistry, with 32% of its staff aged over 55 in 1995, had by 2000 been corrected with the recruitment of new staff. It also pointed out how recruitment to Mathematics, Physics and Engineering had dropped in recent years, mainly because of a drop in student numbers. The report argued that these three disciplines were the only ones that needed to increase recruitment rates to maintain current staff numbers.

These trends and their implications were revisited in a HEFCE report on staffing published in June 2005. It shows how staff numbers in the core social sciences had increased by 12% since 1995/6 (and by 28% in Business Schools and 22% in Education). Education also stands out for having the largest proportion of staff aged 50 or over in 2002/3. It also pointed to the 16% increase in the employment of non-UK nationals across the sector since 1995/6.

Based on the 2002 model, HEFCE (2005) predicts that 720 appointments were needed in 2004/5 to maintain a stable staff population in the core social sciences, a rate that was not predicted to change between now and 2010/11. Significantly, a 2% decrease in recruitment rates was predicted for Education, down from 460 appointments a year; and a 13% increase for Business Studies. Such figures do not point to an impending recruitment crisis in the social sciences.

The recent major survey of recruitment and retention (Metcalf et al 2005) carried out for the DFES by the National Institute of Social and Economic Research offers a different perspective on recruitment and retention problems. Drawing on a number of university case-studies, it concluded that universities ‘did not appear to have widespread recruitment problems’ or see these difficulties as a recent phenomenon. Particular difficulties in certain subject areas were seen as cyclical and linked to the strength of external labour markets. Metcalf et al conclude that difficulties ‘tend to stem more from the quality of applicants rather than the number’ (2005, 14), and that job candidates in professional disciplines often

lacked the requisite research experience. They also suggest that turnover was not seen as problematic, except in the case of institutions losing high profile senior researchers to other UK and overseas universities.

Metcalfe et al carried out an extensive quantitative survey of more than 8600 staff to build a multi-factorial model of peoples' pecuniary and non-pecuniary motivations (e.g. job satisfaction) for joining and leaving universities. This led them to conclude that pay was one of the most important factors, and that 'pay is likely to be a factor encouraging outflow of academics from the UK to the US, but also a factor easing recruitment from Sweden, Japan, Australia and New Zealand' (2005, xiv). The report concluded that in order to counter the problem of higher turnover of international PhD students, more could be done to encourage British students to undertake research degrees, so expanding the supply of UK-domiciled people with PhDs entering the sector; which could also increase retention. We have some reservations about such a blanket policy recommendation. In the second part of this chapter we provide a more nuanced and complex picture of international staffing flows in the social sciences, and argue that it is as important to focus on the retention and development of research staff in the phase after the PhD as on general levels of recruitment. The authors of the DFES-sponsored study do however underline the particular problems facing research staff, including a limited career structure, and their relative insecurity and invisibility within departments.

Comings and Goings

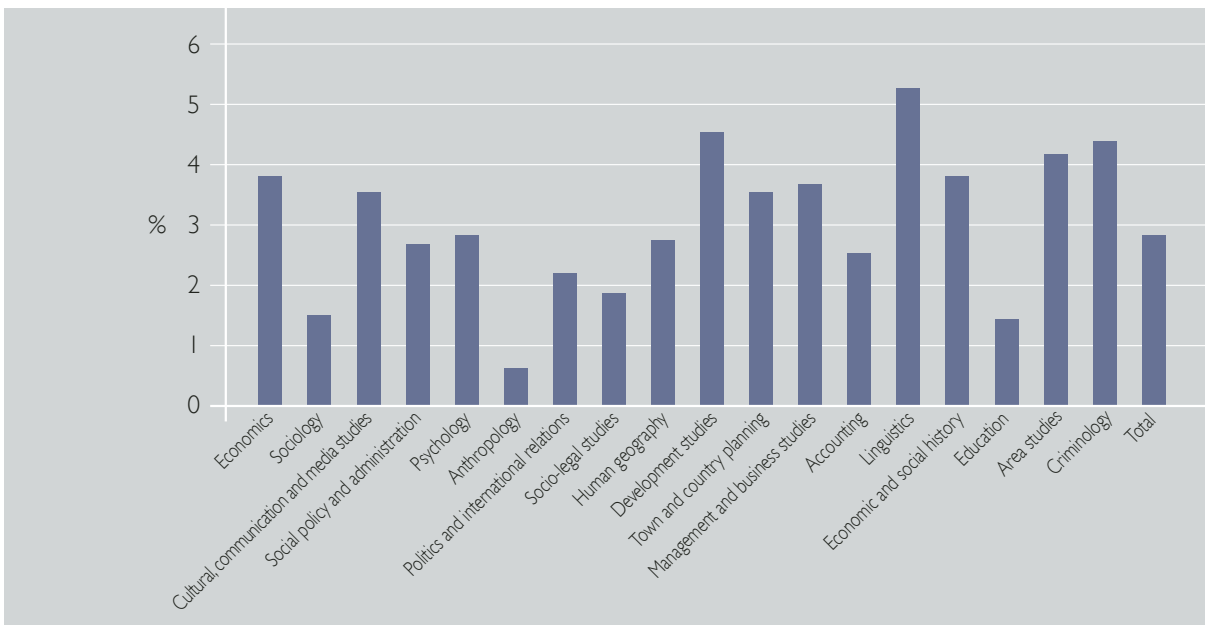
HESA data on staff employment in the previous year reveals that across the social sciences, new appointees made up 8% of all staff numbers in 2003/4. In our own survey, 982 permanent appointments were made in the period from January 2004 to May 2005. Given a total staff population of just over 10,600, this amounts to a 10% appointment rate. It demonstrates the healthy recruitment of new staff across most fields in the social sciences. 52% (376) of the appointments were at lecturer grade, 38% were under 35, and 43% were female.

This seemingly healthy picture of staff recruitment has to be related also to areas of shortage and numbers of unfilled posts. Are there clear recruitment bottlenecks? Of the 200 posts recorded unfilled (2% of all staff), a third were in Management and Business Studies, as one might expect given the relative size of its community. 33% of the 200 posts were at Professorial level, demonstrating the difficulty of filling senior posts.

One third of all respondents reported unfilled posts, but a department's RAE score seemed to make little difference to relative recruitment problems. There were some clear areas of shortage. 6 out of 9 unfilled posts in Economics were in various aspects of macroeconomic theory and quantitative modelling (such as financial econometrics), whilst 7 out of 9 unfilled posts in Geography were in quantitative geography. 13 of 65 unfilled posts in Management and Business Studies were in strategy. Yet, as the following graph (Figure 5.1) shows, with the exception of Anthropology, Sociology and Education, the distribution of unfilled posts is relatively uniform across the disciplines. Economics and Management and Business Studies do not have larger proportions of unfilled posts relative to their total staff size than other fields. This might suggest that recruitment 'difficulties' are partly a matter of perception.

It is instructive to compare numbers of unfilled posts with the reported recruitment difficulties recorded by our respondents. The two are not necessarily congruent. The majority of respondents (58%) reported recruitment problems of some sort, particularly in relation to senior staff and research staff. Fields reporting the highest percentage of problems were Economics (100%) and Management and Business Studies (85% of respondents). Those reporting fewest problems were Sociology, Anthropology, Politics, Linguistics and Area Studies, all relatively autonomous disciplinary fields with fewer links to the non-academic employment market.

We also asked about turnover. For most departments, this was not a concern, and in no discipline did more than 30% of respondents register concern about turnover. A department's RAE score makes little difference to relative recruitment problems. But departments /units with a 5* RAE rating have fewer staff turnover problems than other departments.

Figure 5.1 Unfilled posts as a percentage of all staff by discipline**Department Survey 2005**

Predictive models

In 2002 HEFCE developed a predictive model of permanent staff departure rates, based on a number of different variables, including staff age, research activity, and disciplinary subject grouping (e.g. Business Studies or Social Sciences). It was used to calculate the likely replacement numbers of staff needed to ensure stable staff numbers.

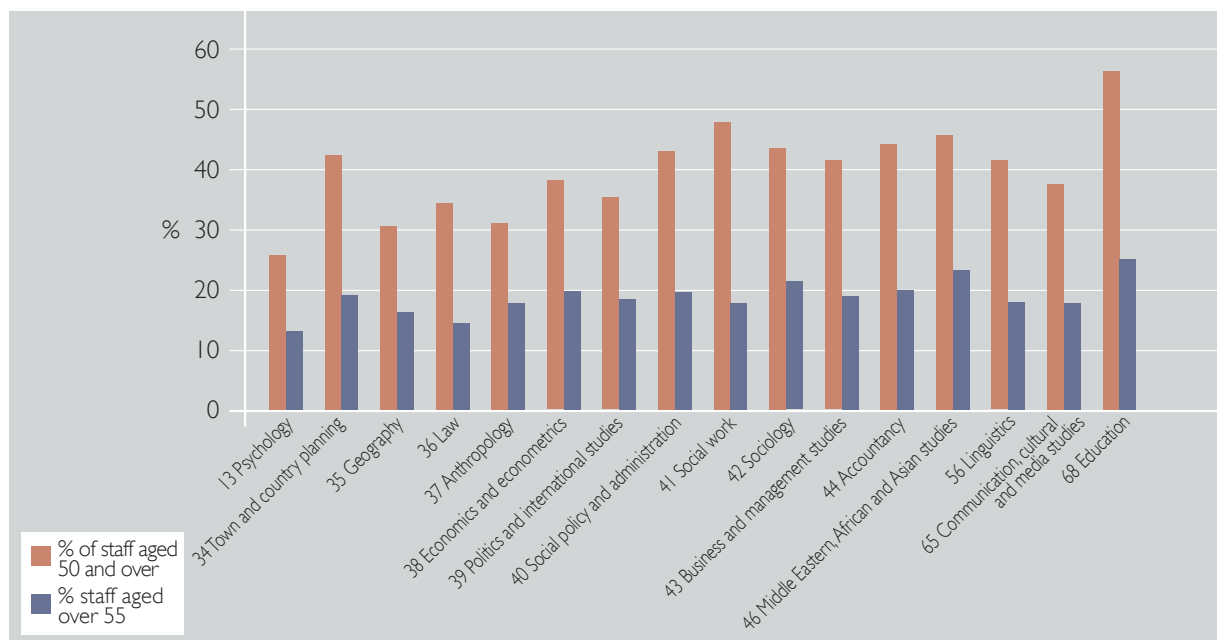
Could a similar predictive model be developed at a discipline level? In interview, the author of the HEFCE model was sceptical. He pointed out that a predictive model depended on accurate counts of recruitment and leaving rates, which were very difficult to assemble at a disciplinary level, given the poor quality of leaving data. He went on to say that *'if you started drilling down, the likelihood is that the data would start to collapse, as there is still some doubt as to whether some staff are recruited or not.'* He explained that *'we could allow for this error at a higher level, but if you drill down and you estimate 20 are leaving, when actually there are 15, that would make it very different.'* His analysis is born out by the small total number of leavers from the social sciences in the 2003/4 HESA returns in relation to the numbers of 'unknowns'. He expressed the opinion that this might be more possible if the quality of HESA-collated data on leavers and destinations improved.

Social Scientists: Aging or 'Younging'?

Is there a looming 'aging' crisis in the social sciences? Is the cohort of staff appointed during the university expansion of the early 1960s now approaching retirement? A number of recent publications (HEFCE 2002, HEFCE 2005, NIESR 2005) have suggested that the current age profile and leaving rates of academic staff raise no major cause for concern. Whilst we support this general conclusion, there are a number of potential problem areas.

It is helpful to look at the percentages of staff over 50 and over 55 (see figure 5.2 below). Education has the 'oldest' staff profile, with almost 70% of its staff aged over 45, and 25% over 55. So is Education facing an imminent demographic 'crisis'? There is more to this than meets the eye. Education departments seek to recruit teaching professionals with extensive school experience to run teacher training courses, and so inevitably those coming into the discipline are rather older than the average doctoral student. Indeed, in 2003 almost a quarter of the successful candidates for ESRC studentships in Education were over 40. As we describe in the Education case-study, the concern in Education is less with looming retirement than with their need to recruit staff that have both research and teaching experience. The great majority of teacher education occurs outside the RAE funding system, and this puts outlets under increasing strain as increased selectivity limits the potential pool of trained researchers. The marketability of their staff's skills outside academia means that Education, like Management and Business Studies, faces specific recruitment and retention issues.

Figure 5.2 Percentages of staff over 50 and 55 in 2003/4 by disciplinary UoA



What of Social Work and Social Policy. Here the apparent cohort 'bulges' are also visible, with Social Work, in particular, having 47% of its staff aged 50 and over, and Sociology and Social Policy having 42% of their staff aged 50 and over, compared to a HE sector average of 40%. Yet here too caution is needed. Like Education, Social Policy seeks to recruit staff with extensive professional experience as well as a research profile, and in 2003, 1 in 8 of its successful doctoral candidates were aged over 40. But it has also been hard-hit by a collapsing undergraduate market, leading to universities closing departments and cutting back on staff. As a result, the age profile of the staff who remain is increasingly skewed.

Management and Business Studies also has over 40% of its staff aged 50 or over – again, this reflects the importance of recruiting staff with business experience to teach MBA and professional courses. Across all the practice-based disciplines, age profiles are influenced by their reciprocal relationship with non-academic labour markets.

What becomes obvious from any close analysis of the figures is that disciplinary age profiles are only partly determined by a cohort effect. Equally important in a dynamic system are appointment and leaving rates for staff at all age-points, and this in turn is tied into student demand. Falling staff numbers in a subject area will inevitably lead to an aging demographic profile. Conversely, expansion will lead to a relatively younger age profile. The final uncertainty is the likely shape of future legislation on retirement. It may be that an extension of the retirement age from 65 to 67 or beyond will encourage research-active staff to remain in post, alleviating rather than exacerbating recruitment concerns.

Our conclusion? That in a dynamic employment market, a focus on impending retirement 'bulges' is less useful than an attention to the recruitment of permanent staff and the retention of research staff.

An international social science labour market?

The globalisation of the UK's academic labour market is not in question. More questionable are assumptions that this is leading to a new academic 'brain-drain' of UK scholars to the U.S and that a reliance on foreign nationals is likely to lead to future instability. HEPI's recent report (HEPI 2005b) described this as 'new world war for talent'. In this vision, internationalisation is not necessarily seen as a human resource problem, but rather as the new 'front' on which the best universities have to compete. Such an attitude was confirmed by one of our respondents, a senior social sciences administrator in an elite university. Describing his institution as recruiting internationally, he detailed the fields (such as Economics and Politics) in which recruitment and retention were most problematic. Yet systematic evidence on individual career motivations is limited, and the debate tends to fall back on anecdote or intuition. The Commission on the Social Sciences (2003) simply comments that overseas students 'seem unlikely to stay in the UK'.

One problem in assessing the long-term effects of international recruitment is that it is too early yet to make conclusions about career mobility. Consider the UK's recruitment of young EU postdocs and PhD students over the last five years; it will be another five before we know how many have stayed and consolidated their position in UK academia by taking up permanent posts.

In this section we review the limited extant evidence on this phenomenon. In particular we examine the recent findings of the NIESR study that non-UK nationals 'enter academic employment in the UK after completing a higher degree in the UK, but ultimately intend to return to their home country' (Metcalf et al 2005: 282). We do not think the available data supports this singular conclusion. We suggest alternative explanations, based on our reading of HESA data, our departmental survey, and a separate data-set on anthropology careers in Anthropology (one of the disciplines with the highest international recruitment). We also review our survey respondents', somewhat varied, perceptions of this trend.

We conclude that the structural division between temporary and permanent staff is a key determinant of career mobility within academia. Rather than seeing people as 'ultimately intending to return', we argue that many temporary staff (both UK and foreign nationals) leave UK academia after failing to obtain permanent posts. As numbers of fixed-term teaching and research staff rise, so too will staff departures. Rather than seeing this emigration of staff as a failing, it could equally be seen as an indicator of the high standards required of permanent staff within UK Higher Education.

Nationality Trends

Within the social sciences, the recruitment of international staff is happening at very different rates. The three disciplinary areas with more than 30% non-UK national staff are Economics, Anthropology and Area Studies (HESA 2003/4). Each in turn recruits from different sources. Area Studies has a predominance of international staff who are neither US nor EU nationals, whilst Anthropology has, after American Studies, one of the largest proportions (12%) of staff who are US or Canadian citizens. Economics on the other hand has one of the highest proportions of EU nationals (16%), a figure that more than doubles when one considers permanent staff under 35.

How fast are nationality compositions changing? In Economics, the percentage of non-UK nationals under 35 in permanent posts has increased from 45% to 55% in the space of 3 years. The development has given rise to much concern within the discipline about the future sustainability of UK Economics.

The following charts (Figure 5.3 and 5.4) show the marked disciplinary divergences in nationality compositions of staff. The proportion of non-UK staff in fields such as Education, Town and Country Planning and Social Policy and Social Work is less than the sector average of 14%, with nationality breakdowns that have changed little in three years. The second graph, showing the changing proportions of UK nationals under 35 employed by discipline in 1994/5 and 2002/3 (based on JACS data) strikingly demonstrates this growing divergence, with Economics, Anthropology and Linguistics increasingly appointing from an international pool of applicants.

Figure 5.3 Nationality of all academic staff in 2003/4 by UoA

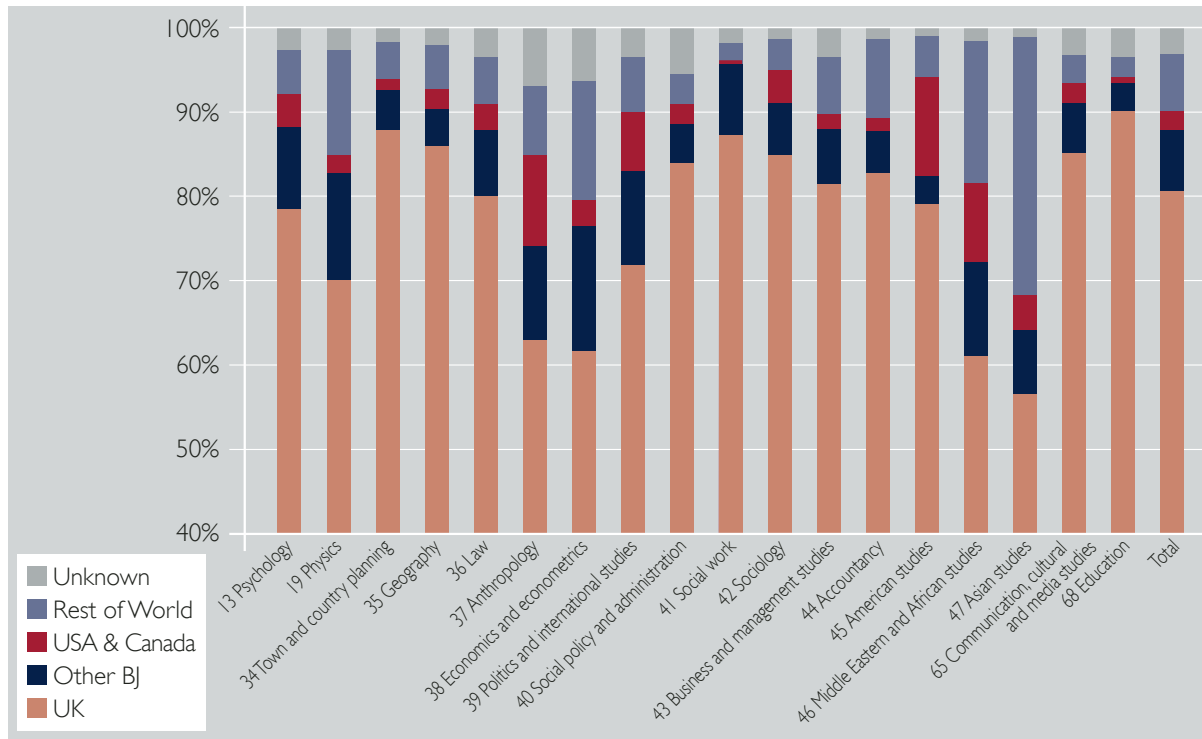
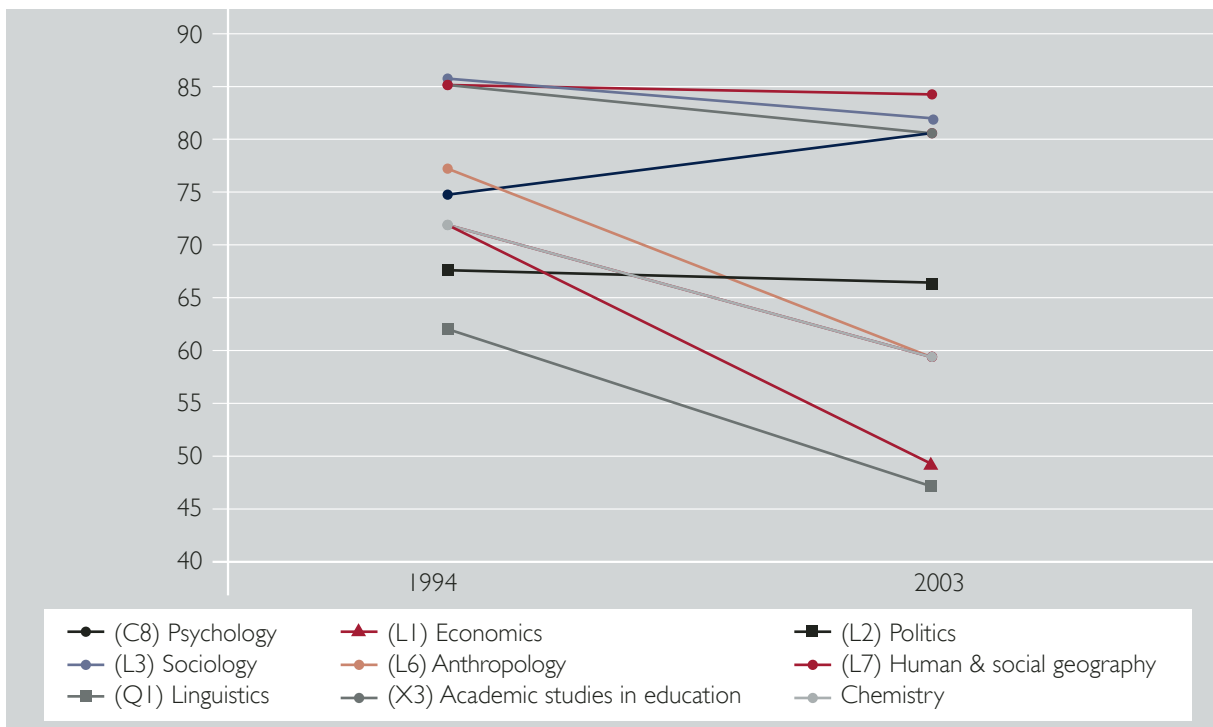


Figure 5.4 Percentage of UK nationals under 35 by discipline in 1994 and 2003



International appointment trends across the disciplines

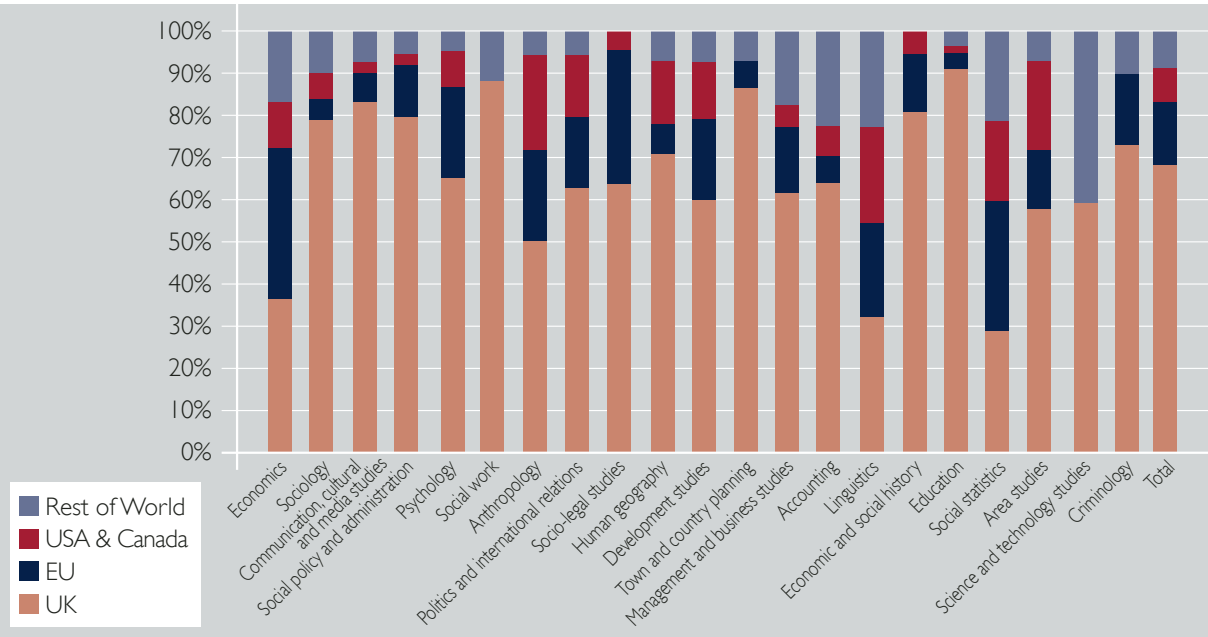
Data from our departmental survey offers insight into nationality trends. Table 5.2 shows that in the year previous to the survey, 957 permanent appointments were made by the 317 departments (representing 10,600 staff), of whom 662 were UK nationals. This means that now a third of all appointments are of non-UK nationals.

Table 5.2 Nationality of permanent appointments in last year (Departmental Survey)

Nationality of permanent appointments in last year (Departmental Survey)			
UK	EU	USA & Canada	Rest of World
662	142	78	75

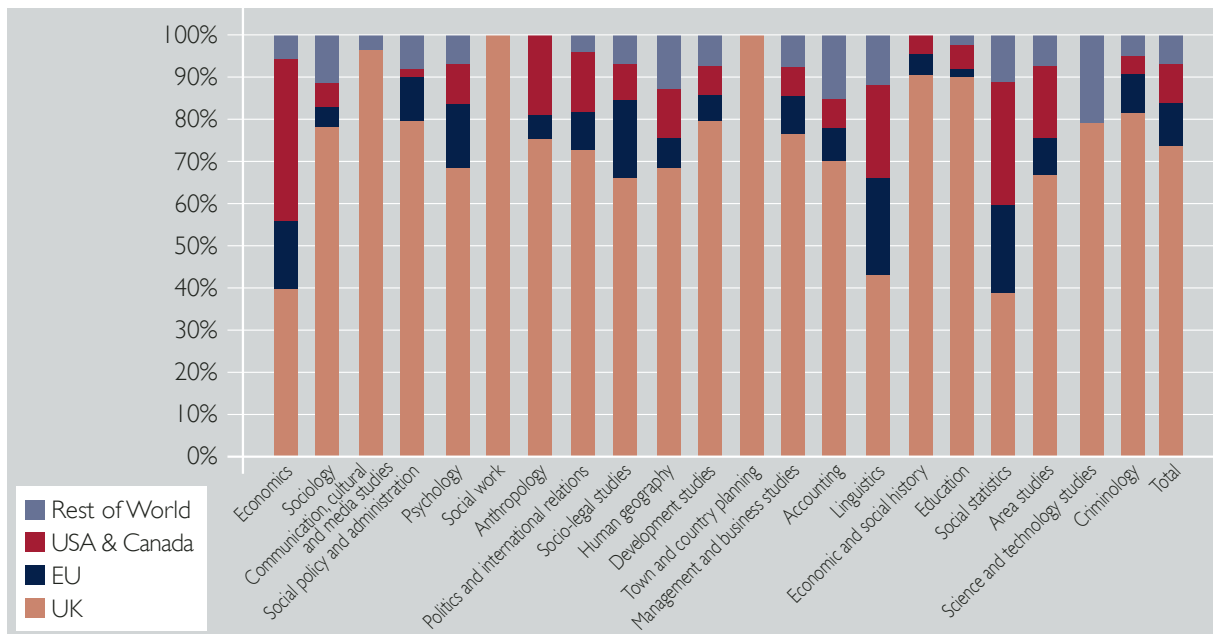
Rates of appointment of non-UK nationals varied greatly by discipline, as the following chart shows. In Economics and Linguistics close to two-thirds of appointments were of non-UK nationals (see Figure 5.5 below)

Figure 5.5 Nationality of permanent appointments in the past year by discipline

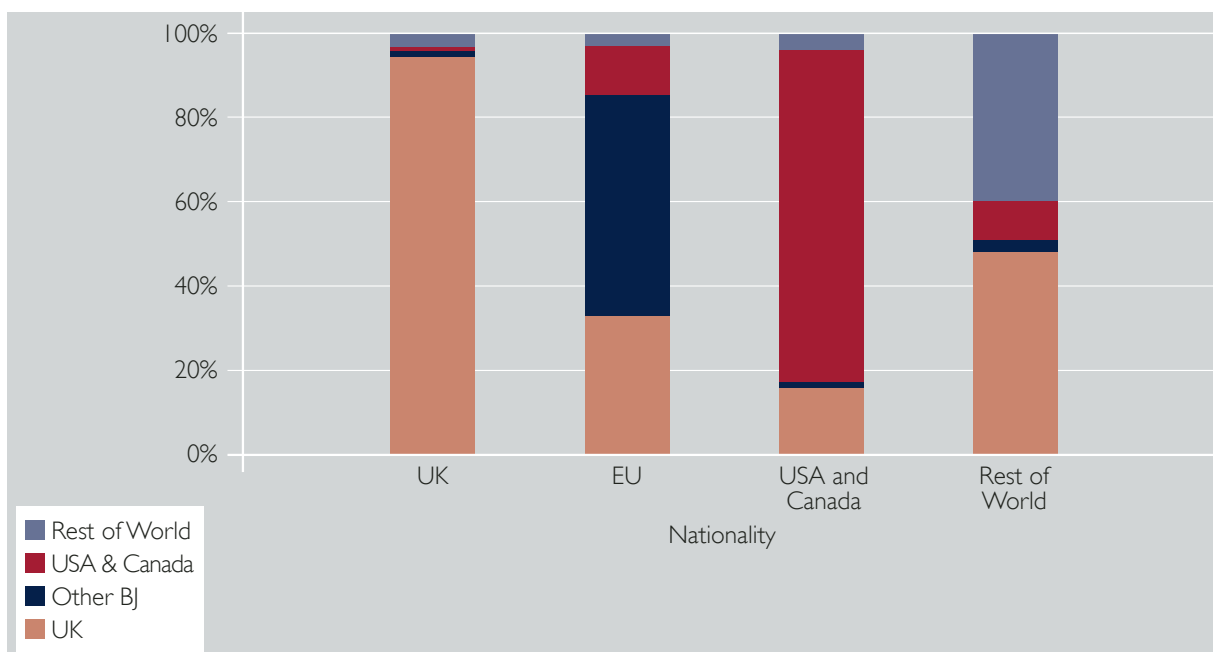


If one examines where recent appointees have completed their highest degrees, we find that 74% of all appointments studied in the UK 10% in the US, and 9% in the EU. Again Economics and Linguistics stand out as having very different career profiles, with only 40% of appointees in Economics completing their highest degree in UK, and 38% in the US, echoing the findings of Bell (2004). This reveals a trend for EU nationals to go to the US to do graduate work in Economics, and then return to the UK to take up permanent posts, whilst all the British nationals appointed to permanent posts did their training in the UK. The Economics case-study provides further details on this trend.

The following chart (Figure 5.6) from our own survey shows where permanent staff have completed their PhDs. Again, Economics and Linguistics stand out for having the fewest UK-trained staff.

Figure 5.6 Location of highest degree of appointments in the past year

The next chart (Figure 5.7) offers a different perspective on this, showing countries of highest degree by nationality. From this we learn that the great majority of UK nationals appointed have done their PhDs in the UK. EU nationals are most likely to have done their highest degrees in the EU, and likewise for US and Canadian nationals. Those with 'other' nationalities are as likely to have studied in the UK as in their home countries

Figure 5.7 Country of highest degree by nationality

Departures from the UK in 2003/4 of permanent staff

We now turn to the available evidence on departure rates. Does it support the widely reported fear that non-UK nationals 'enter academic employment in the UK after completing a higher degree in the UK, but ultimately intend to return to their home country' (Metcalf et al 2005: 282)?

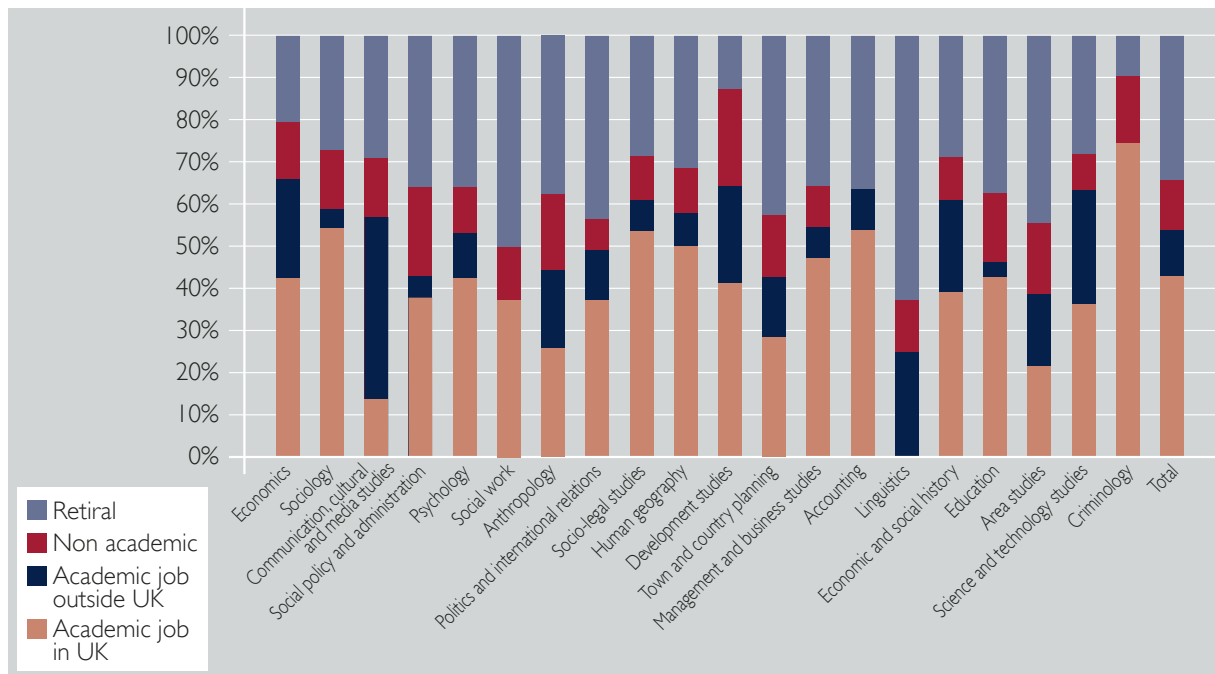
One of the challenges is in the very different readings possible of the same set of statistics. Take the figures on staff taking up other posts in UK Higher Education. In chapter 4 of their report, Metcalf et al (2005) conclude that non-UK nationals 'are more likely to leave' UK academic posts. This is based on HESA data that 45% of non-UK nationals who leave their institution are destined for an HEI in the EU, the US or elsewhere, compared to 14% of UK nationals. The latter group are more likely to move to another UK HEI (87% of movers, compared to 54% of non-UK nationals). However the authors do not point out that, by these very rates, non-UK nationals are also more likely to move to another UK HEI than to leave the UK. They also do not attempt to break these patterns down by terms of employment or subject group. Our own analysis of social science staff reveals a rather more complex pattern.

Metcalf's conclusions about the propensities of international staff to leave are based on developing a model of the factors people cite in response to the question 'are you likely to leave UK academia', rather than an analysis of HESA departure data itself.

So how do Metcalf et al argue their conclusions? Metcalf's specific conclusions about the propensities of international staff to leave are based less on actual patterns of departure, though, but on the factors cited in response to the survey question 'are you likely to leave UK academia?' Whilst their survey shows that non-UK nationals were significantly more likely to leave than UK nationals, the statistical analysis develops a weighting of the different pecuniary and non-pecuniary factors influencing individual decision-making, holding all other factors equal. But they do not break their data down between temporary and permanent staff, which might be more helpful. Given their overall sample size was 2800, the number of non-UK nationals is likely to be 600 at most. Given their conclusion that at most 15% of staff were 'quite likely, very likely, or definitely' changing university, their analysis is built around the intentions of 90 people. They also fail to reveal how big the non-UK population was within their overall survey population of 2800 academic staff.

Can one make any sensible use of HESA data on staff departures? The data is notoriously unreliable because the number of staff reporting their destination is small compared to the 'unknowns' who haven't informed their institution of their new employment location. For example, HESA data for 2003/4 suggests that only 43 permanent social science staff departed HEIs outside the UK, out of a population of almost 20,000 staff. This is undoubtedly an under-estimate, given that our own survey – which only asked for data on permanent staff departures – records 75 departures from a sample population of 10,000. However, if one assumes that there are limited systematic differences in non-reporting across these responses within job categories, then one can use HESA data to compare relative departure rates. As our own survey data only concerns permanent staff, we will return to HESA data on temporary staff in the next section.

First, what have we learnt from our own survey about staff destinations? The following table of permanent staff destinations needs to be treated with caution, because the numbers in some categories are small. Nonetheless, it confirms that Economics and Linguistics work within an international academic labour market, and also reveals a number of other disciplines (e.g. Communication and Media Studies, Economic and Social History, Science and Technology Studies and Development Studies) whose academic skills are in demand elsewhere. This leads us to our data on departure rates. How do destinations of permanent leavers vary by discipline? As one might expect, the largest proportions of retirees are in those disciplines with the oldest age profiles – such as Linguistics, Area Studies and Town and Country Planning. Surprisingly, proportions of staff departing to non-academic employment remain relatively constant across the disciplines. The highest rate is for Development Studies, admittedly with a small sample. That one quarter of these leavers go to non-academic posts shows the marketability of academic skills in this field.

Figure 5.8 Destination of staff leavers by discipline 2004/5

Our departmental survey can be aggregated to explore the destinations of the 675 leavers by nationality and job type. As the following table shows, there is no major drain of staff out of the system. Far more EU and international staff are coming into UK universities than leaving them.

Table 5.3 Destination of leavers by nationality

Nationality	Permanent Appointments	Destination of permanent staff leaver (Departmental Survey)			
		Academic job in UK	Academic job outside UK	Non academic	Retiral
UK	662	254	32	79	213
EU	139	13	11	4	4
USA & Canada	78	6	11	1	6
Rest of World	75	13	22	1	3
Total	982	286	76	85	228

The table reveals that the social sciences (or those represented in our survey returns) are in an expansive phase with 45% more appointments than departures. Secondly it shows that at present the ration of arrivals to departures for non-UK staff varies from 1:4 for other EU nationalities to 1:3 for North Americans to just below 1:2 for staff from elsewhere in the world. These ratios, though, include all departures. If we look specifically at departures for employment in non-UK Higher Education, the ratios of arrivals to departures is much higher (e.g. nearly 1:13 for EU staff). Perhaps most important here is the actual number involved: only 44 non-UK permanent staff (from our total population of 10,000 staff of all nationalities) left for employment in higher education outside the UK. Indeed the bigger move for the population as a whole is not to non-UK HEIs but outside Higher Education altogether (85 departures compared to 76).

Departures of Fixed-Term Staff from UK Social Sciences 2003/4

Why do terms of employment matter so much in understanding international staff migrations? Temporary staff often hold one-year teaching posts or short-term research contracts. They are marginal within their disciplines and departments, tend not to be well-supported, and if not offered permanent posts may decide to leave.

Some numbers to begin with. According to HESA 2003/4, there were 21,140 permanent staff employed in the social sciences, of whom 17,983 were UK nationals and 2,796 foreign nationals. There are 8,073 fixed term staff: 5,799 UK nationals and 1,612 without UK nationality.

Are temporary staff more likely than permanent staff not to be UK citizens? Foreign nationals (which in HESA data also include those with joint nationality) make up 20% (1,612/8,073) of fixed term staff in the social sciences, as opposed to 13.2% (2,796/21,140) of permanent staff. So non-UK nationals are 50% more likely to be on fixed-term rather than permanent contracts. This is as one might expect given the predominance of international staff in the younger age groups within certain disciplines, often many of whom having completed a PhD in the UK.

The HESA data on departures of fixed-term staff are even shakier than the departure information in general. Yet if we aggregate HESA data across all the social sciences, one can compare probable destinations for fixed term staff of either UK or non-UK nationality. For example, of the 95 fixed term staff who moved to another UK HEI, 75 were UK nationals. Of the 25 fixed term staff going to a HEI in another country, 12 were UK nationals.

The probability a non-UK temporary staff moving to a non-UK HEI is $12/1,612 = 0.0074$. But the probability of them moving to a UK HEI = $20/1,612 = 0.0124$, very similar to that for UK nationals in the same contractual situation. So foreign nationals on fixed-term contracts are 50% more likely to move to another UK HEI than to take up an academic post outside the UK. This suggests that such staff first seek permanent employment in UK universities, and if unsuccessful, apply for posts elsewhere. It offers an alternative explanation to the simple conclusion that 'foreign staff are more likely to leave UK Higher Education' (Metcalf et al 2005).

The view from Anthropology

We have evidence from a very different data set on this topic. From separate ESRC-funded research we have been conducting on the career paths of UK Anthropology PhDs we can produce a richer picture of the career trajectories of students who come from outside the UK to complete a British PhD. Our data from this source suggests it may be the fixed-term contract, rather than nationality, that has skewed the responses to the question posed by Metcalf et al on expectations of leaving the UK.

For this research we sought to contact every student who had completed a PhD in a British Social Anthropology department between 1992 and 2002 (approximately 750 in all). We emailed a questionnaire to the 620 for whom we could find contact details and received replies from 310 (a 50% response from those contacted and just above 40% of the total population). The sample is mildly biased towards those who have remained in academic employment. The questionnaire asked questions about current employment, and about all employment since completion of the PhD. Unlike our other evidence, this crucially has a much longer time run, allowing for the possibility of tracing movements between sectors, and geographical locations.

Does our analysis provide any evidence of the widely reported fear that non-UK nationals 'enter academic employment in the UK after completing a higher degree in the UK, but ultimately intend to return to their home country' (Metcalf et al 2005: 282)? What does our evidence tell us about actual careers over time? 178 of our sample were non-UK nationals or held joint nationality. Of these many had gone directly back after completing their PhD to Higher Education employment in their home country, a trend especially true of East Asian students. A very small number had gone directly from a UK PhD to employment in a third country such as the US. 69 had held employment of some sort in UK Higher Education after completion of the doctorate, of whom 59 were still in UK Higher Education.

This leaves 10 who had moved from employment in UK Higher Education to employment outside the UK. Closer investigation reveals, though, that seven of those 10 had had short-term positions (in almost all cases temporary lectureships, or one-year postdocs). That leaves just 3 cases of a person moving out of the UK from a permanent appointment in Anthropology here. Two of these had left academic employment altogether (one to a senior research post

with an international health agency, the other to freelance work). That leaves just one person from the original group of 178, who had followed the predicted route of permanent UK employment as a stepping stone to employment in her home country. On contacting that person, we find that she left for personal reasons, and is now on a one-year contract in a provincial University there. In contrast to this rather startling non-finding, we did track a number of European PhDs who had initially found employment in their home country after the PhD but *then* taken the opportunity to return to UK Higher Education.

There are, of course, caveats to this evidence. It does not tell us about the employment trajectories of academics with non-UK PhDs, and the career trajectories within Social Anthropology are less likely to be shaped by the rather different employment options and labour markets open to academic economists. In this respect, urgent qualitative and quantitative research on the actual career paths of non-UK nationals is needed to flesh out the story told by national datasets. Until then, it is fair to conclude that, on the available evidence, non-UK nationals with UK PhDs represent an important source of high quality recruitment to UK social science.

International recruitment: Perceptions and non-problems

As revealing as actual migration rates, and changing national compositions of the UK social sciences, are the very different perceptions and attitudes to the phenomenon. When is it seen as a problem, by whom, and why?

The final part of our questionnaire asked people whether they felt the recruitment of UK-domiciled staff was important for the future sustainability of their discipline. Views varied widely, within as much as across disciplines. Within Economics, a discipline that has been publicly exercised about its future demography, only two of our 10 respondents felt that UK recruitment of UK-domiciled staff was very important. One felt it was not at all important. The other seven took more nuanced views of the situation, though most had reservations about the long-term consequences of not being able to recruit any UK staff. Two responses exemplify the point that the key issue is not the recruitment of UK nationals per se, but about ensuring that UK academia remains an attractive and rewarding sector in which to work:

This is not of great immediate importance, though visa/work permit difficulties for non-EU appointments have recently become a concern. In the longer term, there is a potential concern that the supply of good non-UK applicants for posts will shrink (as non-UK universities develop and become more competitive), it is therefore important that UK universities remain competitive in the global academic market – an important key to this is adequate funding of the UK university sector.

For the viewpoint of teaching, it is important to have a proportion of staff familiar with UK society in general and its educational system in particular. For research, again it helps to have some staff with a familiarity with the UK since this makes them more likely to do research relevant to the domestic social science agenda. However it is equally important to have a flow of ideas and people from overseas to keep the UK social sciences current and competitive.

Anthropologists were similarly reflective about the situation. Of the 14 respondents, three felt that recruitment of UK staff was very important, two that it was unimportant. The others were more ambivalent. As one respondent commented, *'This question seems to imply that UK domiciled staff are more likely to stay in UK jobs and generate the sustainability, but in our subject scholars tend to be very mobile and willing to take up positions anywhere in the world'*. She went on to note that *'International fluidity in the academic job market is more important than home recruitment, but it is not always easy to compete with working conditions elsewhere.'*

How about our six Linguistics respondents? One felt it was important, two felt it was not important, and another saw international mobility of academic staff as *'a fact of life'*. Where concern was expressed, it was again less around the national composition of UK academia than around ensuring that UK academia was making the best use of its talent. As one put it, *'it is important that the early careers of people who want to make their careers in the UK are properly managed. At present, both the material and the intellectual rewards of moving to North America at or during the postdoc or junior lecturer career phase are disproportionate; most UK institutions simply cannot compete'*.

A similar range of views was encountered in other disciplines. Across all the 317 survey respondents, slightly less than half feel that the recruitment of UK-domiciled staff was important or very important. There was less concern about internationalisation per se than about ensuring universities can recruit the best possible staff. Respondents focused on the long-term implications for the sector of not attracting the best students into PhDs and academic careers, whether they are from the UK or elsewhere.

The debate can work both ways. One geographer noted that *'we are less able to recruit the very best scholars from outside Europe than we would like to, particularly at the junior level'*. There is a further angle to consider – the implications of academic emigration from other countries, especially in the developing world. One respondent commented that this migration was *'parasitic'*, whilst another emphasised the importance *'rebuilding research capabilities and networks with overseas research institutions'*. She went on to note that *'Academic exchange along the lines of the EU Erasmus scheme (but applied to non-EU institutions) would ...do a great deal for strengthening social science research over the next ten years and asserting the world class status of UK research'*.

One comment sums up many responses: *'It would be a shame if one looked abroad only because there were so few plausible candidates in the UK, but otherwise I am happy that we operate in a global marketplace.'*

Our conclusion? That agencies concerned with the long-term health of the social sciences should be seeking practical ways to encourage the retention of the best of our PhDs, whatever their country of origin or location of their first degree.

Key Findings:

- There is a growing concern about recruitment, retention and aging in the UK social sciences. Rather than a generalised age or recruitment crisis, our evidence reveals that these phenomena are discipline and skill specific, and sometimes related to the strength of the relevant external labour market. They have different causes and manifestations, and need to be tackled in different ways. The case-studies in this report address this diversity in detail.
- National data-sets offer limited insight into the changing shape of disciplines, their particular recruitment patterns and career paths, and their relationship to non-academic labour markets. Recruitment also depends on undergraduate and postgraduate 'demand', which can fluctuate over time. Can one develop a predictive model of disciplinary recruitment and training needs? Such a model would require accurate counts of appointment and leaving rates. In a dynamic and changing employment market, such data is very difficult to collect accurately at discipline level.
- In a dynamic employment market, a focus on impending retirement 'bulges' is less useful than an attention to the recruitment of permanent staff and the retention of research staff.
- The fields of Education, Management and Business Studies, Social Work and Social Policy appear to have 'aging' demographic profiles. More than half of the staff in Education are aged 50 or over. Social Work (47%), Social Policy (42%) and Management and Business Studies (41%) also have high proportions of older staff. However there is more to this than meets the eye. These fields tend to expect their lecturing staff to have acquired practice-based experience and developed a research profile, especially in the pre-1992 universities. Each field has its own specific entry-points and employment patterns, but these broadly combine to make permanent appointees relatively older than their peers in the research-focused disciplines.
- Education's profile is particularly unusual, because it often recruits senior teaching professionals from secondary education. In a similar way, professionals take up posts in a number of practice-linked disciplines as 'second-career' researchers. Such recruitment patterns may be changing as universities continue to prioritise appointees with extensive research experience in response to RAE pressure.
- Within the research-focused disciplines, Sociology also has 42% of its staff aged over 50, and Linguistics just over 40%. These age profiles are more likely to be the cohort effect of 'bulges' in staff appointments (e.g., in the 1960s and early 1970s) working their way through the system. They may also partly be the result of a drop in student (and thus staff) recruitment in these disciplines.
- The majority (58%) of respondents to our survey do report recruitment problems of some sort. They are particularly highlighted in relation to senior and professorial staff, staff with advanced quantitative skills, as well as research staff. Fields reporting the highest percentage of problems were Economics (100% of respondents) and Management and Business Studies (85% of respondents).
- The distribution of unfilled posts is relatively uniform across the disciplines, equivalent to 3% of all permanent posts. One third of these posts were at professorial level. Economics and Management and Business Studies do not report larger proportions of unfilled posts relative to their total staff size than other fields. Some respondents identified particular sub-specialisms and growth fields as a concern because institutions were chasing a small pool of strong candidates. Others were worried about the quality of appointments to senior posts.

- Recruitment and training concerns expressed by the policy and practice-linked disciplines are a key priority for the ESRC. Their dual identities as fields of academic research and areas of professional practice are a strength rather than a weakness, but one that requires academics to have both professional practice and research experience. The recruitment difficulties these fields face could be addressed in creative ways by institutions. One solution might be to create more salaried doctoral training positions that allow people to fund their PhDs whilst teaching. Universities may also need to support junior researchers and PhD students to acquire the relevant professional experience. Competition with the non-academic labour market is probably inevitable, and may well be cyclical, depending on the relative health of the broader economy.
- In general, our survey showed that Heads of Department did not see turnover as a problem, although dissatisfaction with RAE-related poaching was cited as a concern by some, especially in post-1992 institutions. A department's RAE score seems to make little difference to relative recruitment problems. But departments/units with a 5* RAE rating have fewer staff turnover problems than other departments. Institutions are increasingly developing human resource strategies to tackle recruitment and retention problems in particular disciplines, such as Economics. These ameliorate but are not seen as solving recruitment problems.
- Non-UK nationals with UK PhDs represent an important source of high quality recruitment to UK social science. The recruitment of international staff is increasing in several of the social sciences. This trend is most marked for Economics: in 2003/4 only 45% of their permanent staff under 35 held UK nationality, while 40% of new appointments were EU nationals, with another 20% US nationals. This phenomenon is also especially visible in Anthropology and Linguistics. The social sciences are not unique, and similar trends are occurring within Physics and Chemistry. However other social science disciplines, such as Social Work, Social Policy and Education have experienced no equivalent levels of international recruitment.
- Non-UK nationals are more likely to hold fixed-term contracts than permanent contracts. Such staff are more likely to move to another UK HEI than to take up an academic post outside the UK, but those staff who do take up academic posts outside the UK are more likely to have been on fixed-term contracts. Non-UK nationals with permanent contracts are as likely to move to another UK HEI as to a non-UK HEI.
- Our survey reveals that senior figures are less concerned about employing international staff *per se* than about ensuring that UK universities remain competitive and can recruit the best possible staff. Respondents focused on the long-term importance of recruiting the very best students – whether or not they are UK nationals – to do PhDs and develop academic careers. The future international competitiveness of the UK social sciences also depends on ensuring that the best UK-trained PhDs remain employed within UK Higher Education, regardless of their country of origin or location of first degree.

**‘Part of the issue is that the disciplines diverge widely in their
‘purity’ and autonomy’**



6 The Future of the Social Sciences

Introduction

One of the original purposes of this review was to map emerging specialities and sub-disciplinary fields within the existing social science disciplines. But it is equally important to document the growth of inter-disciplinary, cross-disciplinary and multi-disciplinary initiatives. What challenges were these posing to existing disciplines? How did new researchers and postdoctoral fellows relate to their disciplinary training? What skills are needed of researchers working in ESRC-funded multi-disciplinary centres, and what career opportunities are open to them? In this final chapter, we tackle each of these issues in turn.

Emerging fields and sub-disciplines

As part of the survey we asked respondents to identify what they felt were the key emerging sub-fields within their discipline. Perhaps it was too much of a leading question. In general there was little consistency on sub-disciplinary 'needs'. As one person put it, *'I think it is a bad idea to guess what these are as this inevitably leads to targeting of funds to that area at the expense of existing areas.'* Responses were highly diverse, and many respondents rather transparently identified their own institution's emerging strengths as defining the research frontiers in their discipline as a whole. As a result there was often little consensus within each discipline.

What the responses do however demonstrate is the very different ways in which disciplines develop. Some disciplines tended towards a list of particular sub-fields. For example, a number of anthropologists pointed to the growth of specific sub-fields such as visual or medical anthropology. Others were developing through collaborations with, or appropriations of, other disciplines.

Psychology responses stood out because of their attention to inter-disciplinarity itself as a key growth area. As one person commented, the *'conceptual issues arising through the inter-relationships between: (i) the social sciences and neurosciences, and (ii) the social sciences and engineering (e.g. nanotechnology)'* were most at stake. Another noted that the *'borderlines with, for instance, Sociology, Computer Science, Biology'* were particularly fruitful.

Part of the issue is that the disciplines diverge widely in their 'purity' and autonomy. We have shown how Social Policy, Development Studies and Area Studies already define themselves as 'rendezvous disciplines', bringing different fields together. Our survey confirms the emergence of Criminology both as a discipline in its own right, and as an important growth field within Sociology and Social Policy. As one Sociology respondent noted *'The most pronounced change has been the emergence of Criminology as a highly popular subject at the undergraduate and postgraduate levels and as an area of research activity.'* At a more international level, several respondents within Media, Development Studies, and Politics cited the 'war on terror' and a growing interest in security issues and conflict management as areas of growth.

Not everyone welcomed the diversification of sub-disciplinary fields. One sociologist in an elite institution noted somewhat grumpily that *'Sociology has too many subfields as it is. The ones that appear to be "growing" mostly have nothing to do with social science as I understand it.'*

Finally, respondents from several different disciplines drew attention to the most ambitious forms of inter-disciplinary working, and what one sociologist called *'research between social and natural sciences'*. An anthropologist pointed out that *'the most important developments will take place at the inter-disciplinary interfaces, particularly the interfaces between social science and the natural and biomedical sciences'*.

The rise of inter-disciplinary work – the ESRC Research Centres

The ESRC funds more than 30 Research Centres, as well as a number of programmes and networks where multi- and cross-disciplinary work is the norm. They bring together staff with the appropriate skills and knowledge for the Centre's research agenda. The Centres employ staff from right across the social sciences, nurturing emerging fields from Genomics to Risk, from Sustainability to Security. In contrast to the discipline-led approach of the ESRC postgraduate provision, one's disciplinary background has less relevance, although some Centres are dominated by a single disciplinary culture.

In comparison to Heads of Departments, Centre and Programme Directors have a rather different perspective on skills shortages and growth fields. We sent them a modified version of our questionnaire, and fifteen centres responded. The directors focused on the importance of providing a sustainable career for research staff outside the usual disciplinary appointment and promotion structures. They also drew attention once again to the limited supply of UK social researchers who have high level quantitative skills.

Key issues included staff continuity and the length of research contracts. As one director of a longitudinal data resource noted, *'we need some continuity of staff, they need not necessarily be UK-born, but some at least should be planning to stay around. Long-term contracts would help, not a series of short-term contracts such as those from government departments'*.

Some were resigned to losing their staff to permanent lectureships, whilst others felt that more could be done to help people develop and sustain research careers. As one London Research Group director put it, *'Very good researchers on relatively short term contracts (2-3 years) move on to permanent posts.'* Another called for *'More opportunities for researchers to put together a funded career where they can also do some teaching RATHER than always having contract staff who are looking to take up permanent academic positions'*. A third bemoaned the fact that *'there do also seem to be a few more openings for younger people to take up tenured teaching posts, so they write a couple of papers and then you lose them.'*

Several of the centres are London-based, with the associated problems of accommodation costs. As one director noted, *'Research work in my department is fast becoming a 'component wage' job ...the only people able to afford to do it are the partners of stock brokers'*. She dryly added that *'we now have a bit of a breathing space due to some people inheriting London houses, but that is hardly the way to run things.'*

Finally, several decried the shortage of applicants, and especially UK applicants with quantitative skills. As one vocal advocate of quantitative methods 'apprenticeships' put it *'It is a great irony that we have huge and constantly increasing data sets becoming available at a time when it is nearly impossible to find people who can handle the data in even the most basic ways'*. She warned of the possibility that young staff would not be adequately mentored and trained in the maintenance of these long-term data sets.

Research careers in the social sciences

The future of the social sciences is embodied in today's generation of postdoctoral researchers. In order to gauge their views, we conducted a postal survey of ESRC postdoctoral fellows, asking about their future career plans. We received 20 survey returns from the 60 surveys we sent out. We followed this up with several focus groups with fellows at their annual conference in June 2005.

ESRC postdoctoral fellows are a cosmopolitan group. 60% of the successful applicants for fellowships in 2005 completed their first degree in the UK, but it is likely that less than half hold British or joint nationality. There was no evidence that ESRC studentship holders found it easier to transfer to postdoctoral fellowships than those without. From our sample, the average age of female fellows was 34, five years older than the men. The most represented disciplines were Politics (6), Geography (3) and Psychology (3), all research-focused 'exporter' disciplines by our definition. None of our respondents were from post-92 institutions

The views of post-doctoral fellows: Focus Group and Survey findings

All but two of the fellows were considering more than one career option, but most were planning a research-led academic career. Two out of three respondents planned to seek work in the UK, whilst 80% cited location as a key factor in their career choices. Several mentioned the importance of family and domestic responsibilities in shaping their career choices, and that this was a major consideration in deciding whether to go for a temporary lectureship in another city. It was felt that their willingness to be mobile was often taken for granted.

Many of the fellows had an idealistic vision of their own future: a research-focused career that combined their research interests with a bit of teaching. But there was also an air of resignation: the pressure to publish was keenly felt. They saw 'four good publications' as their only passport to a permanent post. There was a widespread view that without the requisite 'four publications' for RAE purposes they were unlikely even to be considered for a permanent position, a view apparently reinforced in many cases by misplaced advice from supervisors. Few were aware of explicit RAE concerns about the treatment of early career researchers, concerns turned into concrete provision in most social science panel criteria. There seems to be a real danger that local interpretations of RAE expectations may be driving talented researchers out of academia altogether.

They were aware of the importance of networking in seeking jobs, and this was cited by several non-UK fellows as a reason for staying in the UK – they already knew the system and the people. The common perception that there were not enough posts, and several cited the experience of being short-listed several times but not getting the job. Part-time positions were seen as a way of staying in academia, and a means of getting 'embedded' within a department. But they also recognised that this could lead them to be exploited. People complained about a general lack of career guidance at the PhD and postdoctoral level. They felt that it was assumed that young researchers knew what they were doing, and that advice from mentors was rather *ad hoc*.

All the fellows appreciated the principles of the fellowships. One said that it felt like '*being paid to look for a job*'. By the same token, most were also all frustrated at the one year time scale. Most felt that it was unlikely that, within the space of a year, they would be able to build up a necessary body of publications.

Not all understood the restrictions facing those pursuing a purely research career within the social sciences. Whilst their ideal was to pursue their own research, they saw postdoctoral posts as a stepping stone to getting a permanent lectureship. But several were critical of the short-termism of contract research posts: '*it is a distraction, and one can't create one's own academic niche, which is so important...that one little bit of originality the PhD gives you is undermined by someone else's research*', and '*gives you no time to write or think about your career*'.

At least two had foreign partners, and their options included returning to their partner's own country if permanent jobs didn't come up in the UK. Those who weren't from the UK had a much more international view of the academic market: if they were from Europe, then Europe was their field of view. They aimed to establish their career here over a few years, but if they had no success, then they would consider international options.

What of the role of inter-disciplinary working? A few classed themselves as inter-disciplinary, but had received mixed messages. One said she felt schizophrenic, another felt that they were '*weaker in all the fields I cover when it comes to jobs*' when pitched against candidates from a single disciplinary home.

A Research Centre Case Study

One way of illuminating these issues is by focusing on the training, recruitment and retention difficulties faced by one interdisciplinary research centre – the Institute for the Study of Genetics, Biorisks and Society – led by Professor Robert Dingwall at the University of Nottingham. The views, presented in the form of a dialogue, offer telling insights into the tensions between disciplinary reward structures and interdisciplinary working, the difficulties facing dual-career households, and the consequences of a changing gender-balance within the academic work-force.

Tell us about your centre. Have you found it hard to recruit research students?

We are an interdisciplinary research institute specialising in science and technology studies and established to respond to the growth in this area. There has been a steady growth in ESRC and other funding, although the ESRC postgraduate investment has not fully kept pace. We have been internally re-allocated quota studentships from other social science outlets and submitted applications through them, where possible, to enhance recruitment but this has not been wholly satisfactory and has become more difficult under the recent restrictions on numbers of competition entries.

What sort of staff recruitment problems have you faced?

Good quality research staff are difficult to recruit. There are three reasons for this. One is the reluctance of people to, as they see it, marginalize themselves in disciplinary career terms by working in an interdisciplinary group. A second is the limitations of our regional labour market for supporting dual-career households. The third is the constraints on pay and conditions that lead to a low-paid and insecure environment. These result in part from the approach of funders in, implicitly or explicitly, capping available salaries and abdicating responsibility for career development and in part from the lack of interest and/or imagination in picking up these issues by universities as employers.

Is turnover an issue?

Yes, mainly for the second and third reasons above. We have steadily lost good people because of the limited employment opportunities for their partners, who often have more lucrative career tracks which make them the pole towards which our staff migrate, rather than vice versa. We also lose people because we cannot offer the security that young people are

rightly looking for in thinking about paying off student debt, buying houses and starting families. This means a steady drain of researchers just as they acquire enough experience to make a useful contribution and to have some prospect of becoming the next generation of Principal Investigators in their own right and a diversion of effort by senior staff into recruitment and mentoring at the expense of their own research contribution.

How do you see the future sustainability of the social sciences?

From our perspective, something needs to be done about the 'silo mentality' that is running through an increasing range of the social sciences, and is reinforced by university understandings of the RAE. Real world problems do not come in disciplinary shapes and need multi-disciplinary teams to address them. However, we are frequently frustrated by the conviction of potential postgraduates and research fellows that they are compromising their careers by working across disciplinary boundaries, publishing in unconventional places and using non-canonical ideas. We are also seeing a gradual shift in the gender balance of the workforce because of the reluctance of good male graduates to enter a low-paid and insecure career track: although women may still not perceive themselves as being offered employment with flexibility and equal opportunities, there is no doubt that HEIs do much better than many private sector employers and we see that women are prepared to trade this against the lower pay levels. We think that it will be a long-term concern that something like two thirds of our postgraduates are women.

How important do you think it is to recruit UK-domiciled staff?

Very important. At present, we are benefiting from the stagnation of the academic labour market in Germany but the potential recruits are, in many areas, not as appropriately trained as the best ESRC students. They also lack a feel for the culture and history of the society in which they are asked to work, and, although fluent in English by most standards, actually struggle with the kind of nuances that are critical for high quality social research.

Conclusions:

The case-study demonstrates the complex challenges faced by those leading or pursuing inter-disciplinary research. Disciplinary identities seem to matter least in the newly emerging fields of science studies, but working on 'unconventional' and interdisciplinary topics is also seen as risky in career terms. Most postdoctoral fellows in our focus groups identified with a single disciplinary home. Most of these fellows were from research-focused 'exporter' disciplines that inculcate a strong sense of disciplinary loyalty and belonging. Internationally-trained researchers may be less swayed by such considerations, but then salaries and stipends become equally important, and the UK stipends are uncompetitive with those offered by the EU.

Part of the problem is also that research-track careers are very unusual in the social sciences. In 2003/4, only 110 of the 3800 professors across the social sciences were in research-only posts. That is less than one per HEI, leaving the majority of staff without such role models, and viewing research-only posts as low status.

Amongst the ESRC postdoctoral fellows surveyed, the women attached more importance to family and domestic child-care considerations in their career plans. This gendering of career priorities is exacerbated by the low status, uncertainty and short-term outlook facing those on research contracts. It makes women even more likely to leave academia.

It would seem that ESRC-funded Research Centres are particularly dependent on a supportive institutional ecology to be successful. Without the 'conventional' rewards of disciplinary status or academic job stability, the centres are more vulnerable to regional labour market issues, such as house prices in London or the need for both partners in a relationship to find work locally. Each centre is embedded differently within their host institution, requiring tailored and individual responses.

There are obvious common concerns facing social science researchers. The challenge is to attract the best possible candidates to such posts, by making them stable and financially rewarding. This is a challenge for funders as well as for host institutions. These are concerns that the ESRC would do well to seek to address systematically in collaboration with Research Centre Directors.

Making the links between teaching and research more active (e.g. by directly involving postgraduates and undergraduates in faculty research) serves to expose students at an early stage to academic research cultures, making them more likely to maintain an involvement with their disciplines. In the practice-based disciplines, this is also a way of reconciling capacity-

building and training for professional practice. Since 2003, the US National Science Foundation in the US has required all research grant applicants to explain how their research will promote 'teaching, training and learning'.

Key findings

- The ESRC-funded Research Centres offer a very different perspective on research skills to that found within the disciplines, highlighting a post-disciplinary role for the social sciences. They focus on the importance of creating sustainable career structures for research staff beyond the disciplines. This is made difficult by the time-limited funding granted to the centres, and problems with fixed-term employment contracts. Their directors also point to the problems caused by a limited supply of British social researchers with high level quantitative skills.
- The RAE culture presents particular challenges for young researchers, and is felt by many of them to have a negative influence on the development of research careers. Personal and family considerations weigh heavily in the anticipated future plans of young research staff and post-doctoral fellows. Non-UK postdoctoral fellows envisage establishing careers in the UK, but see academia as wholly international.
- Young researchers receive very mixed messages about the value of inter-disciplinary work from their mentors, and they are often advised to remain within disciplinary cultures of patronage and networking. Postdoctoral fellows are sensitive to existing university research and status hierarchies. They also spoke negatively about the consequences of being 'burdened' with heavy teaching loads.

7 Conclusions

In compiling this demographic review we have drawn together evidence from a variety of sometimes conflicting sources. One of the challenges facing the social sciences is balancing the needs of discipline-based academics with those who do interdisciplinary, multidisciplinary and practice-linked research.

Should the ESRC in developing its future training and development policy prioritise the research-focused disciplines over the practice-linked disciplines? Or should funding be re-directed to build up research and training capacity in the 'importer' disciplines? There is an inevitable trade-off between rewarding the quality of current research and training and the strategic enhancement of research capacity.

Any simple classification of priorities by disciplinary cluster is flawed. There is great variation between the disciplines associated with professional practice and applied research, and an equal diversity within the research-focused cluster. We are not the first to identify the development of research capacity in Education as a concern. Management and Business Studies faces similar problems for different reasons. Initiatives such as AIM (Advanced Institute of Management Research) in Management and Business Studies and the TLRP (Teaching and Learning Research Programme) in Education are beginning to have an impact, though the size and dispersed nature of both disciplines makes change slow.

Not all practice-linked fields experience the problems of Management and Business Studies and Education. For example, Criminology is an effective bridge between Law and the other social sciences and between Law and empirical and applied research. Development Studies has also been able to nurture lively theoretical debates whilst remaining engaged with practice-led concerns, despite being vulnerable to the policy agendas of its major external funder (DFID).

Is a division between the disciplinary clusters inevitable? Can the social science community, led by the ESRC, find ways to bridge the divide? Psychology offers one possibility. Whilst an 'exporter' discipline located within the research-focused cluster, it has very clear links with practitioners and applied research. In this sense it combines the strengths of both clusters: it is highly research active, it is perceived as 'relevant' and engaged and has a clear research career structure that resembles those in the natural sciences. It also benefits from strong links between academic psychologists and those in professional practice, equipping its PhDs with a strong disciplinary identity and a well-stocked toolkit of skills. Many also end up in Management and Business Studies and Education. Psychology provides an effective model for practice-linked disciplines, incorporating strong empirical work into its theory and practice.

What are the implications of this review for the research-focused cluster? Rather than punish the 'exporter' disciplines for their success in training and getting their PhDs employed, we suggest that the focus should be on raising the quality of research training and academic development in all disciplines, with the aim of enhancing the autonomy and status of the 'importer' disciplines, as well as continuing to address their systemic problems.

There are also areas of concern that span several fields. The training and recruitment of staff with advanced quantitative methods was raised as an issue in several disciplines as well as in Social Statistics. We make a number of recommendations regarding the provision of Masters training in this area.

What should be the ESRC's long term strategy? Perhaps the ultimate aim would be a situation where disciplinary 'quotas' were no longer appropriate or necessary. Applicants would have an equal chance of gaining studentships in an open merit-based competition, regardless of disciplinary affiliation or institution. Doing this would gradually eliminate the need for broadly demarcated priority areas. At the same time, the ESRC may need to more precisely target additional funding within particular sub-disciplines as necessary.

Are there any obvious gaps in current training provision? Few immediate gaps are visible. One that stands out in the comments of both research centre directors, and academics in a number of disciplines, is the need for systematic training for those working on the boundaries between the social sciences and medicine, and the boundaries between the social and natural sciences. This requires a specific set of skills and capacities, and is an area that would merit further investigation and intervention by the ESRC.

Have we found any evidence of over-supply? This has not been an issue for our respondents. We have found that those taking PhDs within some of the 'exporter' disciplines (such as Anthropology) may be as likely to find employment elsewhere in academia, and outside academia, as in their home disciplines. This does not in itself equate to over-supply.

One cannot control a dynamic and changing employment market, and the high quality of a discipline's research culture partly depends on having a competitive pool of applicants for permanent posts. Reports such as the UK GRAD Programme's 'What do PhDs do' (2005) and work commissioned by the ESRC on the needs of non-academic employers (Purcell and Elias 2005) show that those with social science PhDs are highly employable outside universities, and similarly do not reveal any sign of over-supply.

How should the ESRC respond to the increasing numbers of non-UK nationals employed in certain disciplines? We would suggest that this be welcomed as a sign of the growing international profile of these disciplines, and a source of vitality and innovation rather than instability. The challenge becomes one of encouraging the strongest candidates (including British nationals) to apply for PhDs, and to help them to seek subsequent permanent employment within UK universities. This is best done by ensuring that studentship stipends are competitive with those offered by the EU and, legislation permitting, offering EU nationals full studentship stipends in certain disciplines (e.g. Economics). Further research needs to be done into those pursuing increasingly international academic career trajectories, and the role of fixed-term contracts, caring responsibilities and gender in shaping longer-term career choices.

At the same time, more could also be done to strengthen networks, academic exchanges and research linkages between UK and overseas universities (especially those in less developed countries), so to advance the possibilities for collaborative international research. This would also help to assert the world-class status of the UK social sciences.

This report has said relatively little about academic teaching. Preparing new university teachers to teach effectively is also a way of helping PhD students and postdoctoral fellows present and disseminate their work. Institutionally-delivered teaching preparation programmes do not always successfully meet the needs of the social science community. The ESRC should be encouraging disciplines to think creatively about ways of preparing future faculty for academic practice, and the best way of including it within research training provision.

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Appendix I: The departmental survey

National-level data sets are inevitably limited in helping understand staffing issues at an institutional or departmental level. Discipline and institution-specific concerns over staff recruitment and retention are best explored through more targeted surveys and detailed qualitative work. The web-based questionnaire of the social sciences used as the basis for this review was a modified version of Professor David Bell's survey of Economics (Bell 2004), as proposed by the Commissioning Panel.

Adapting the survey for use across the great diversity of social science units/outlets in the UK was not straightforward. Initially, we had planned to gather detailed information on staff numbers, age, gender and nationality profiles by department. In a series of pilots, respondents felt unwilling or unable to provide answers to the accuracy desired. We thus reduced the amount of quantitative data that we were requesting, replacing some of it with a series of open-text qualitative responses. For example a key variable in the Bell survey is the national location of staff members' first and highest degree. We decided to ask this only with respect to new appointments since January 2004. We began designing the questionnaire in January, piloted and revised it in March, did further piloting, and then finally circulated it, together with a covering letter from Professor Ian Diamond, in mid March.

We relied on learned societies, committees of Heads of Departments and Higher Education Academy subject centres to circulate information about the questionnaire to heads or representatives of departments or units. By our reckoning more than 1000 departmental and institutional contacts were sent information about the survey and asked to go to www.socialsciencereview.org.uk to fill in the questionnaire. We asked our contacts to tell us the approximate size of their contacts lists. However some of these lists would have been in need of up-dating, and so it is likely that some of the contacts would not have been 'live'.

A more significant problem for us is that they also do not always accurately represent the relative size of each disciplinary field. For example, 50 surveys were distributed within Linguistics, but only 20 research-active Linguistics departments made a submission to the 2001 RAE. Thus this mailing list included many applied linguistics and language training departments, for whom the questionnaire was largely irrelevant. The email list in Geography included all departments, but only those with a Human Geography component were asked to return the questionnaire.

Table A1.1 Numbers of surveys distributed by discipline

Human Geography	125
Psychology	110
MBS	100
Education	80
Sociology	80
Soc Policy/Soc Work	80
Politics /IR	70
Media Studies	60
Dev't Studies	40
Economic and Social Hist	15
Town/Country Planning	25
Area Studies	35
Anthropology	20
Linguistics	50
Socio-Legal Studies	70
Social Statistics	30
Criminology	20
Total:	1010

In some cases (such as Socio-legal Studies and Social Statistics), it proved difficult to identify relevant departments, and so the questionnaire was circulated widely, and the figures above represent estimated maximum possible potential returns.

We asked our intermediaries to send two sets of reminders, and we also relied on contacts within the ESRC Training and Development Board, and our own personal contacts, to boost response rates. Nonetheless, some email circulation networks proved far more effective than others at reaching people, and response rates do vary by discipline. As this became clear, we used other methods, such as personally contacting ESRC Recognised training outlets and asking them to return the questionnaire.

No doubt some respondents filled in the questionnaire with an eye to the potential funding or political impacts of this review. In one case, two respondents from the same department filled in identical returns to ensure their views were heard! This needs to be borne in mind when analysing the findings.

What sort of response rate did we get? In total we received 317 returns, an impressive global response rate of around 31% for a web-based questionnaire. Indeed, this figure is likely to be an under-estimate, given the way that the questionnaire would have been irrelevant to many of those circulated (especially in Geography, Linguistics, Media Studies and Social Statistics). One can calculate the response rate by discipline, but caution needs to be taken here for this reason, as we show below (excluding Economics, which was not targeted because of the excellent existing data available from Bell 2004):

Table A1.2 Survey response rate by discipline

Discipline	No of responses	% response rate
Economics	11	N/A
Sociology	29	36
Media and Cultural Studs	12	20
Social Policy / Social Work	17	21
Psychology	46	42
Anthropology	14	70
Politics/IR	23	33
Socio-legal Studies	19	27
Human Geography	20	16
Development Studies	7	18
Town Planning	6	24
Management	40	40
Linguistics	7	14
Eco & Social History	10	66
Education	21	26
Social Statistics	4	13
Area Studies	18	51
Science Studies	3	N/A
Criminology	9	45
Total	317	31

There are other ways to assess the survey's coverage. For example 101 responses were received from the 20 Russell Group institutions with social science faculties – an average of 5.0 from each institution. 70 responses were received from the 16 '1994' group institutions – an average of 4.4 from each institution. The post-1992 institutions were under-represented in the survey. Another way is to see how many of the 221 departments in the social sciences scoring an RAE of 5 or 5* in 2001 returned questionnaires. In total, 112 of the 221 returned surveys, a rate of 52%. Disciplinary returns by 5 or 5* departments were as follows:

Table A1.2 Disciplinary returns by 5/5* departments

Accounting /Finance	1 / 14	7%
Anthropology	10 / 14	72%
Area Studies	11 / 14	79%
Culture and Communication	4 / 8	50%
Education	5 / 14	36%
Geography	7 / 16	44%
Linguistics	7 / 12	59%
MBS 4 / 16	25%	
Politics/IR	8 / 23	35%
Psychology	18 / 28	64%
Social Policy	3 / 6	50%
Social Work	3 / 8	38%
Socio- Legal Studies	13 / 21	62%
Sociology	15 / 19	79%
Town and Country Planning	2 / 8	25%

A final measure of returns is to measure the number of departmental responses by discipline against the total staff numbers within departments. It demonstrates that returns from Management and Business Studies and Education were low relative to staffing in those fields, whilst Psychology and Area Studies were over-represented in departmental survey returns. However on the whole, survey returns were broadly in proportion to staff populations.

In order to follow up particular queries with respondents, we asked people to provide us with their names and institutions. This enabled us to email or phone for clarifications, and also to identify others who would be useful to interview.

Survey Instrument

Survey of Heads of Departments/Subject Areas

Name:

Institution:

Title(s) of unit(s) or department(s):

I Please choose the category that best describes the disciplinary field of your department(s) or unit(s). If more than one category is applicable please detail in "Other". Options:

Economics, Sociology, Cultural, Communication and Media Studies, Social Policy and Administration, Psychology, Social Work, Anthropology, Politics & International Relations, Socio-legal Studies, Human Geography, Development Studies, Town and Country Planning, Management and Business Studies, Accounting, Linguistics, Economic and Social History, Education, Research Methods, Social Statistics, Area Studies, Science and Technology Studies

Other (Please indicate):

2a How many core-funded permanent academic/teaching staff FTEs are there in your department(s) or unit(s)?

2b How many teaching staff FTEs are on temporary or fixed-term contracts?

2c How many research staff FTEs are on fixed-term contracts (including postdocs)?

- 3** Please provide, where possible to easily ascertain, the age, job grade, nationality and country of highest degree of up to five permanent appointments (do not include internal promotions) made in your subject area since January 2004:

- 4** Please provide details of the nationality and subsequent destination of up to 5 permanent staff members who have most recently left or retired from your department/subject area since January 2004:

- 5** Your department or unit's 2001 RAE score:

--

- 6a** Estimate of the number of new taught Masters FTE students registered in 2004.

--

- 6b** Estimate of the number of new research postgraduates registered in 2004.

--

- 6c** Estimate of the number of PhD completions in 2003/4.

--

- 6d** Does your unit/outlet have ESRC "I +3" recognition for research training?

--

- 6e** In which subject area is it recognised?

--

- 6f** Does it have ESRC quota Awards?

--

- 7** List any recent permanent posts – by grade and field – that you have been unable to fill to your original job specification:

If there are further unfilled posts, please indicate the total number (excluding those listed above):

--

In this final section, we would value your views on the future of your disciplinary field:

- 8a** What do you see as emerging subfields or areas of "growth" in your subject area?

- 8b** Is this reflected in funding opportunities at the postgraduate or post-doctoral level?

9a Do you have particular problems recruiting certain grades/categories of staff?

9b Is staff turnover a problem? If so, please elaborate:

10a Do you have any suggestions for enhancing the future sustainability of the UK social sciences?

10b How important is the recruitment of UK-domiciled staff for this sustainability?

Appendix 2: Disciplinary descriptors and bi-plots

Nine questions were asked of each departmental respondent as a way of characterising the descriptive similarities and differences between Disciplines.

Table A2.1 Discipline Profiles – Characteristics

	Brief title	Question Wording (Characteristics)
1	Perm-Staff	How many core-funded permanent academic/teaching staff FTEs are there in your department(s) or unit(s)?
2	Temp-Staff	How many teaching staff FTEs are on temporary or fixed-term contracts?
3	Res-Staff	How many research staff FTEs are on fixed-term contracts (including postdocs)?
4	Staff-Band	(Aggregation of all staff numbers into 5 intervals of width 10, with a sixth band for 51-100, and a seventh band of More than 100)
5	RAE	Your department or unit's 2001 RAE score
6	Masters	Estimate of the number of new taught Masters FTE students registered in 2004
7	Postgrads	Estimate of the number of new research postgraduates registered in 2004
8	PhDs	Estimate of the number of PhD completions in 2004
9	ESRC-Trg	Does your unit/outlet have ESRC "I +3" recognition for research training?

In order to provide a profile for each discipline, these numbers were first averaged within the project's 20 disciplinary fields. These original data (in the form of a table of means) are presented in Table 1A.

Table A2.2 Averaged Departmental Estimate Numbers, by Discipline Group

	Perm Staff	Temp Staff	Res-Staff	Staff Band	RAE	Number-Masters	Postgrad Nos	PhDs	ESRC-Training
Economics-10	24.23	2.13	3.78	3.20	4.44	63.90	8.00	5.80	0.70
Sociology-25	18.78	1.99	4.03	2.92	4.43	28.48	7.64	5.16	0.72
Media-12	16.73	2.98	1.75	2.50	4.22	51.25	4.79	2.50	0.00
Social Policy-7	19.10	1.13	8.33	2.86	4.00	101.07	6.21	4.14	0.71
Psychology-45	23.07	1.84	10.38	3.60	4.29	26.68	7.18	4.29	0.49
Social Work-3	8.50	1.23	5.63	2.33	4.33	26.33	1.67	1.67	1.00
Anthropology-13	13.61	2.23	4.38	2.46	4.92	28.19	10.27	8.15	0.85
Politics-19	18.24	1.90	1.98	2.67	4.40	62.86	12.33	5.48	0.76
Socio-Legal-17	20.40	1.68	3.18	3.06	5.00	64.09	5.06	4.18	0.24
Geography-17	19.49	1.47	4.76	2.94	4.27	30.06	7.59	5.71	0.71
Development-6	10.95	1.42	9.32	2.50	3.75	91.67	9.17	4.33	0.50
Planning-5	17.08	0.80	2.00	2.60	3.80	37.80	3.80	4.40	0.60
Business-31	56.01	6.37	5.27	4.77	3.63	199.13	10.32	5.19	0.42
Accountancy-3	78.17	6.67	4.33	5.33	3.67	193.33	13.67	5.00	0.67
Linguistics-7	11.43	2.00	6.71	2.57	5.57	19.64	8.68	4.43	0.43
Econ-History-10	13.39	2.15	3.50	2.40	4.56	25.35	5.50	3.50	0.60
Education-21	41.11	7.01	9.60	4.48	3.89	77.62	16.33	8.57	0.33
Statistics-2	15.20	2.70	8.50	3.00	4.50	23.00	5.50	3.00	1.00
Area-Studies-14	12.75	1.68	0.21	1.86	4.92	14.00	4.14	2.62	0.21
Science-Studs-1	24.00	8.00	6.00	4.00	5.00	10.00	8.00	10.00	1.00
Other-46	23.62	2.48	4.89	3.28	4.21	68.80	6.78	4.11	0.39
Total-316	24.89	2.81	5.42	3.26	4.32	63.83	8.20	5.09	0.50

(The number following the Discipline Group is the number of department/respondents represented in the Group).

Some modifications had to be made before further analysis:

- In the case of Management and Business in particular, high outliers on some constituent indicators had to be excluded because their inclusion would have dominated all the data.⁴
- With the exception of (ESRC-Trg, which is in effect a proportion), all the indicators on each profile are based on raw frequencies, and any analysis will therefore reflect a general overall size factor, which will not be of importance in assessing relative differences. In order to emphasize the relative differences between disciplines, the data were standardised before analysis, rendering them commensurate (Table 1B).
- To reduce extraneous variation, Disciplines were removed which were either:
 - too heterogeneous (e.g. "Other")
 - too small [Science Studies (one department), Social Statistics (two departments)] or
 - whose respondents were overwhelmingly not from ESRC-recognised or funded departments (Area Studies).

This left a total of 17 Disciplines that were entered into the analysis.

Analysis and results

The standardised and reduced data table is presented in Table 1B.

Table A2.3 Standardised Departmental Estimate Numbers, by Discipline Group

	Perm Staff	Temp Staff	Res-Staff	Staff Band	RAE	Number-Masters	Postgrad Nos	PhDs	ESRC-Training
Economics	0.005	-0.268	-0.546	0.082	0.271	-0.046	-0.036	0.573	0.544
Sociology	-0.304	-0.340	-0.452	-0.239	0.251	-0.712	-0.136	0.186	0.630
Media	-0.421	0.172	-1.311	-0.720	-0.168	-0.284	-0.930	-1.425	-2.441
Soc.Policy	-0.286	-0.785	1.167	-0.308	-0.607	0.654	-0.534	-0.432	0.587
Psychology	-0.061	-0.418	1.939	0.540	-0.028	-0.746	-0.264	-0.341	-0.351
Soc.Work	-0.889	-0.733	0.150	-0.915	0.052	-0.752	-1.798	-1.927	1.824
Anthrop'y	-0.598	-0.216	-0.321	-0.766	1.230	-0.717	0.596	1.996	1.184
Pol/IR-	-0.335	-0.387	-1.224	-0.526	0.191	-0.065	1.169	0.380	0.800
Soc.Legal	-0.212	-0.500	-0.772	-0.079	1.389	-0.042	-0.855	-0.407	-1.418
Geography	-0.264	-0.609	-0.177	-0.216	-0.068	-0.682	-0.150	0.519	0.587
Developmnt	-0.750	-0.635	1.540	-0.720	-1.106	0.477	0.290	-0.317	-0.309
Planning	-0.401	-0.956	-1.217	-0.606	-1.006	-0.537	-1.205	-0.274	0.118
Business	1.812	1.927	0.015	1.880	-1.346	2.498	0.610	0.204	-0.650
Account'cy	3.072	2.082	-0.339	2.521	-1.266	2.389	1.542	0.089	0.417
Linguistic	-0.722	-0.335	0.557	-0.640	2.527	-0.878	0.153	-0.256	-0.607
Econ-Hist.	-0.611	-0.257	-0.652	-0.835	0.511	-0.771	-0.732	-0.819	0.118
Education	0.965	2.258	1.645	1.548	-0.827	0.213	2.282	2.251	-1.034

(6/9/05)

(Entries more than ± 1.75 SDs are emboldened)

These data are analysed using a metric biplot model.⁵ The two-dimensional solution is presented in Figure 1.

*[The key to interpreting biplots is that the Characteristics (columns) and the Disciplinary Groups (rows) are both positioned with respect to each other. Thus, the vector representing each Discipline points in the direction in which its scores are increasing, so that if the characteristics are projected onto the Discipline's vector, they best reproduce its profile]. These characteristics provide the framework for interpreting the composition of the Discipline profiles (vectors) and for examining how they cluster [For the biplot model, similarity between any two Discipline profiles is represented by the angle separating them: the smaller the angle, the higher the correlation between them].

⁴ The most striking example was Henley Management College, which had returned a figure of 5500 FTE Masters students, hugely in excess of any other department in that disciplinary heading.

⁵ Data: Rectangular row-conditional; Transformation: Linear; Model: Point-Vector (Scalar-products); Program: MDPREF in NewMDSX. Goodness of fit: 0.657

Conclusion

At first sight, there seem to be few marked differences: Disciplines have a similar profile with respect to the nine characteristics we have used. Indeed, the 19 Disciplinary profiles correlate linearly at values between 0.92 and 0.99. But this massive apparent consensus masks both very considerable individual departmental differences (which we have not addressed here) and also large relative differences between Disciplines and Disciplinary Groups. To highlight these relative differences the tactic adopted here is to extract the average profile and also make the variables commensurate by normalising them to common z-unit. This yields the standardized data set (Table 1B).

That done, the data are analysed by a Bi-Plot method which represents both the Characteristics and the Disciplines in the same 2-dimensional space, with Characteristics represented as points and Discipline profiles as vectors.

This yields a full range of variation – three-quarters of the circle of possible Disciplinary variation is occupied – and reveals a structure of three readily identifiable Groups which differ in the pattern of their profiles. The most dramatic and persistently different group is Business Studies/Accountancy, which is dominated by major differences (compared to all other disciplines) in Staffing and the number of new taught Masters degree students registered – and this despite removing the single largest source of difference.

Appendix 3: Glossary

ABS – Association of Business Schools

AHRC – Arts and Humanities Research Council

AIM – Advanced Institute of Management

ALSISS – Academy of Learned Societies for the Social Sciences

CASE – Collaborative Awards in Science and Engineering

DFES – Department for Education and Skills

DFID – Department for International Development

ESRC – Economic and Social Research Council

HEFCE – Higher Education Funding Council

HEI – Higher Education Institute

HEPI – Higher Education Policy Institute

HESA – Higher Education Statistics Agency

ITT – Initial Teacher Training

JACS – Joint Academic Coding System

JUC -SWEC – Joint University Council Social Work Education Committee

MBS – Management and Business Studies

MRC – Medical Research Council

NERC – Natural Environment Research Council

NIESR – National Institute of Economic and Social Research

PGCE – Postgraduate Certificate in Education

RAE – Research Assessment Exercise

SCIE – Social Care Institute of Excellence

SIESWE – Scottish Institute of Excellence in Social Work Education

TLRP – Teaching and Learning Research Programme

UCEA – Universities and Colleges Employers Association

UoA – Unit of Assessment



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